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Institute of  
Social Studies

MIGRATION, INDUSTRIALIZATION AND DEVELOPMENT OF NATIONAL  
LABOUR FORCE: CHALLENGES OF DEVELOPMENT IN THE ARAB GULF  
COUNTRIES

A Research Paper presented by

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In Partial Fulfilment of the Requirements for Obtaining the Degree of

MASTER OF ARTS IN DEVELOPMENT STUDIES

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The Hague, December 1995

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### **DEDICATION**

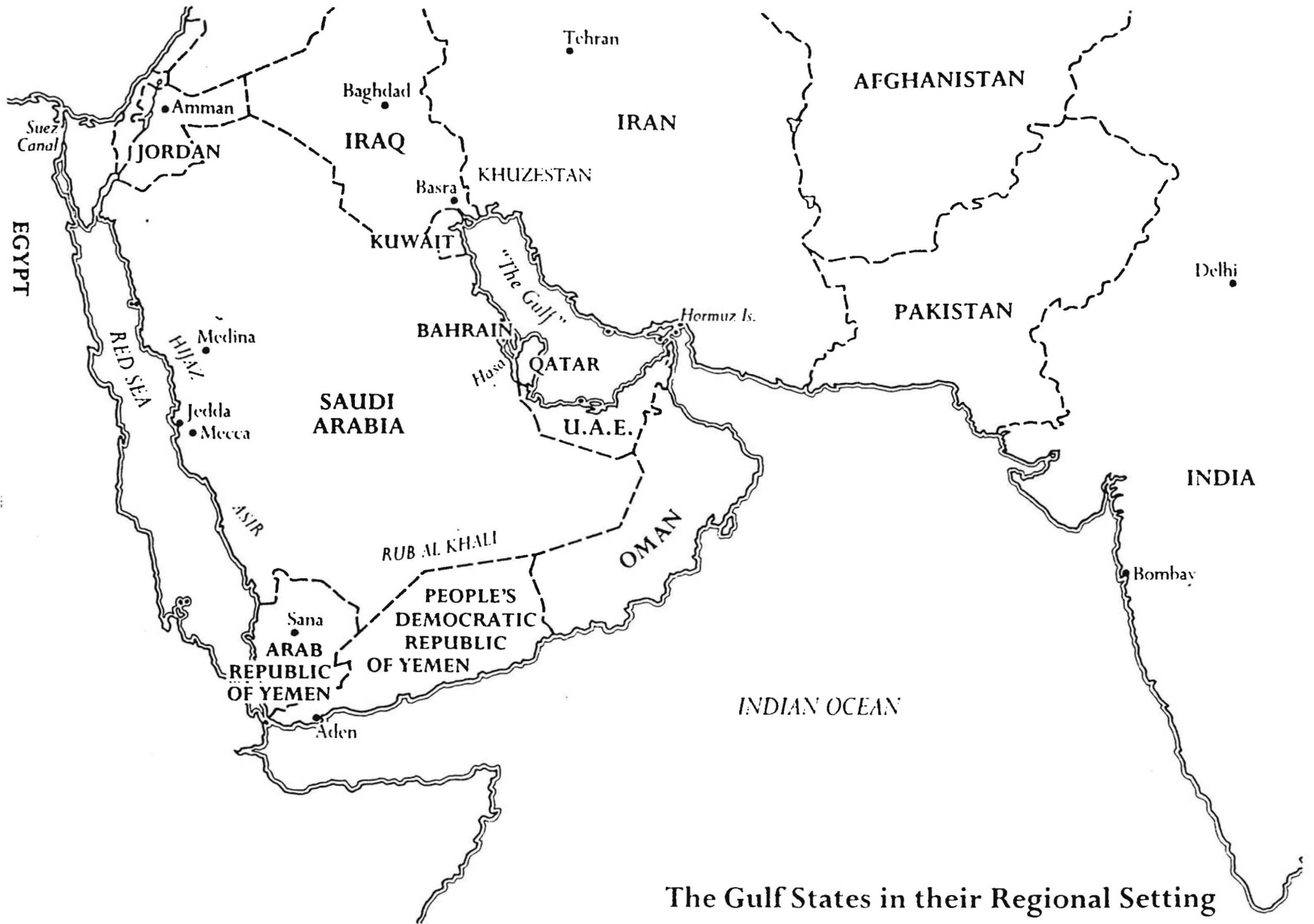
This research paper is dedicated to the memory of my parents, Osman and Amna, and my grandmother, Fatima, who, all, passed away during my stay in the compulsory exile.

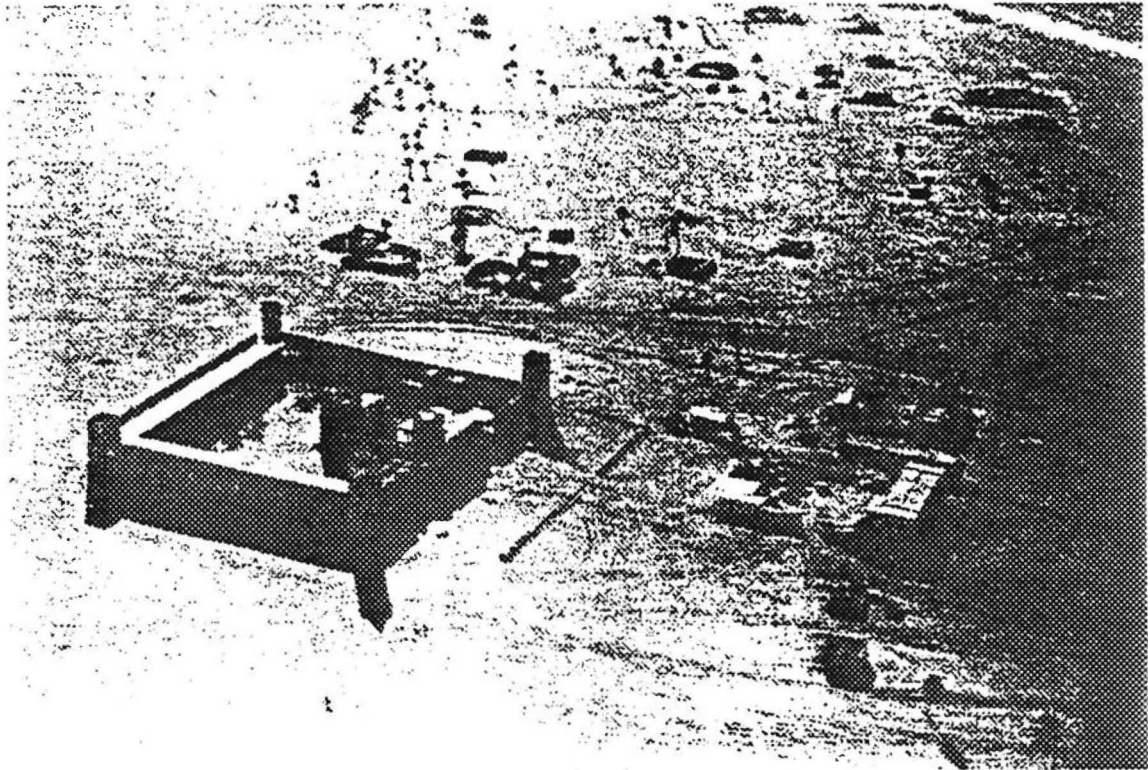
### **ACKNOWLEDGEMENT**

I would like to express my gratitude and appreciation to my first supervisor, Dr. Abbas Abdelkarim and my second supervisor, Pascal B. Mihyo for the guidance and comments in the completion of my research paper. Thanks are also due to all the faculty members and my fellow participants in the Employment and Labour Studies programme, and to the Programme Secretary, Mariaane Aarts.

# The Gulf States







Aerial view of Abu Dhabi in 1958, the year oil was discovered there, with the ruler's fort in the foreground



Aerial view of Abu Dhabi two decades later

SOURCE: Rosemarie, S. Z. 1989.

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**CHAPTER I**  
**INTRODUCTION**

**1.1. GENERAL OVERVIEW:-**

On the contrary to the past, in which Gulf countries were hardly known internationally and mentioned only as the legendary home port of sinbad the sailor, nowadays the image of these countries has been changed to remain the focus of the international interests (politically and economically) due to their oil resources (approximately half of the world's oil resources are in the Gulf region) and due to the strategic geographic location. The importance of these countries to the industrialized world was confirmed by President Carter of USA in his January 1980 state of the union address: "Any attempt to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America" (cited in Rosemare,S.Z. 1989:144). "By 1991, following the Gulf War, the status of the gulf region as a link in the chain of the world capitalist system was obvious to all. The more integrated the Gulf political and economic structure becomes in the global economy, the more important it is to the West to maintain its stability even at the prise of reinforcing the Gulf region's dependency, traditionalism and backwardness" (May Seikaly, 1994:415).

The Gulf countries, have been united in the Gulf Co-operation Council (GCC) since 1981 and the main objective (among other political, social and cultural objectives) of the GCC is to unite these countries through creation of an open market in the region.

Before the exploitation of oil, Gulf economies were poor and dependent on traditional activities such as pearling, date gardening, pastoralism, fishing and mercantile activities. Since early 1970s the economies of the Gulf have been dominated by the oil industry. The ratio of oil exports to the total exports is approximately 90% and the contribution of the oil sector to GDP is more than 50%. This oil-dominated economies and lower rates of diversification are attributed to



the shortages of natural and human resources in the GCC countries (the population of the GCC was 19.8 million in 1988 with Saudia Arabia with 14 million).

The discovery and exploitation of oil, however, strongly influenced the economic and demographic development structure of the region. GCC countries have witnessed extra-ordinary transition from poverty to welfare and prosperity levels within few decades. The high rate of the socio-economic change can be seen in the rapid expansion of education and health facilities, variety of development projects, huge industrialization and well-established infrastructure base and communication networks. For example, the patient/doctor ratio in Kuwait in 1986 was 572 which can be compared to the ratio of Germany which was 425 in the same period (Klaas and Galaty cited in Raffer and Salih, 1992:231) and before the Gulf War the health system in Kuwait was considered as one of the best in the world. This socio-economic transformation relies basically on imported migrant labour and technology.

Since the oil prises rises of 1973 GCC countries have started large-scale development programmes to modernize their societies due to availability of huge financial resources. During the 1973 Arab-Israeli war and as the result of the extensive military support to Israeli side by USA and some Western European countries, all Arab oil producing countries imposed an oil embargo on them which lasted for five months. The prises of the oil rose dramatically from \$3 to \$17 per barrel in a few weeks. Since 1973 and upwards during the 1970s the prises continued their increase, especially after the fall of the shah of Iran which led to reduce the output due to oil strike by the oil workers during the revolution, and by 1981, the cost was \$34 per barrel. To illustrate this extra ordinary financial windfall accompanied the rise in oil prises, The Economist of (27 June 1987) "estimated that after the 1973-74 prise rises, Saudia Arabia and some of its OPEC allies were accumulating foreign-exchange surplus at around \$ 115,000 a second; and they could have bought the equivalent of the four British clearing bank every eleven days, or all the equities

on the London Stock Exchange after nine months". Moreover, the Gulf region is regarded as the most cost-efficient area in oil production in the World where one oil barrel production costs only one dollar compared to \$ 3 to \$ 15 in other areas (Al-hayat, 29 September 1995:13).

According to World Bank data of 1981, the per capita income of some selected countries in the gulf region were ranked amongst the top 30 with Qatar, UAE and Kuwait occupying the top three positions respectively. The path and pattern of development in all gulf countries are noticed to be similar and they have adopted similar development strategies seeking for economic change. This similarities include large government sector, ever-increasing standard of welfare and incomes and ambitious industrial development programs.

Hennery, T. Azzam (1980:33) adopts Rostow's stages of economic development on the scenario of the GCC region and he argues that these countries "are in the stage of transition from the " take off" stage to that of maturity. The take off stage is almost completed, it lasted from the early 1970s till the mid-80s ..... the take off witnessed social, political and cultural changes ..... The "drive to maturity" stage had actually started..... During this age , the economies of Gulf will shift gradually away from oil to a more diversified production base".

The region has witnessed huge influx of migrants from all over the world and it has been estimated that the nationals of Kuwait, Qatar and the United Arab Emirates (UAE) are regarded as a minority in their own countries. The first flow of migrants came from Arab countries (Egypt, Sudan, Palestine, Jordan, Yemen and Lebanon) while during 1980s trend has been changed and the recruitment of the Asian labour (form Korea, the Philippines, Pakistan and India) has began. Gulf region can be taken as an example of how much international migration can benefit the receiving countries because this region owe so much of its socio-economic development to the migration factor where in 1991 (ESCWA 1992) the Gulf's migration represented 10% of the total world's migration. International labour

migration in the GCC countries has had and will continue to have a major influence on economic development in the region. This attributed to the fact that despite their small populations, GCC countries have achieved remarkable economic development within a short period of time.

Following the fall in oil prices since 1982 and due to social and political crisis such as the first and second Gulf Wars, GCC countries have started restructuring their economies by adopting diversification policies. The main targets of the diversification strategies have been:

1. To make GCC countries less dependent on imports (especially on food).
2. To make the economies of GCC countries less affected by oil revenues fluctuations in the future.

Economic diversification policies of the Gulf countries have resulted in restructuring in manpower requirements in which a variety of highly trained skills are needed.

#### **1.2. THE GULF COOPERATION COUNCIL:-**

The Gulf Cooperation Council (GCC), which include Saudia Arabia, Kuwait, Bahrain, Qatar, The United Arab Emirates and Oman, was formed in 1981 as a direct response to the new challenges appeared in the region by the starting of the first Gulf war between Iran and Iraq. The regional security is argued to be the major driving force for the GCC but other economic and soci-cultural objectives are also declared to unite the member countries in a great common market as future objective. It made up of three bodies; the supreme council which consists of the heads of the states; the ministerial council which consists of the foreign ministers and the General Secretariat based in Riydah (Saudia Arabia) the head quarter of the GCC. The nationals of the GCC are treated as nationals in all member countries and they are enjoy various privileges (work permission, investment, trade, travel....etc).

In attaining economic integration and establishment of common market, common regulations in different areas have been

adopted between the six countries: the removal of custom duties on locally produced goods; low common tariff on imported foreign goods and the removal of transit taxes of goods passing within the region. To coordinate and link the economies, GCC in 1982 established the Gulf Investment Corporation (with a capital of \$2.0 billion). Examples of its huge investment in the region are dairy project in Qatar, pharmaceutical company in Kuwait, a foil mill in Bahrain and a bio-engineering chicken-breeding project in Saudia Arabia.

Following the decline in oil prises, the coordination and the linkages of different development plans in the countries of the GCC has become essential to rationalize the spending of their resources which allows high levels of specialization in economic activities in the region to correct some development mistakes that happened in the early development phases such as projects duplication and white elephant projects. The clear example of economic integration in GCC is the direct link and coordination between Saudia Arabia and Bahrain in the dry docks, aluminum smelter, banking services and commercial and transport sectors. Beside that the two countries are sharing oil revenues of the Abu Safa offshore fields. On the other hand, Qatari iron and steel industry are integrated into Saudi development projects. Integration "could enable the member countries to coordinate their development programmes to avoid duplication (especially in oil-based industries) .....integration should enable them to agree on a programme of specialization..... Integration could also enable the countries of the GCC to coordinate their education and training efforts..... Moreover, integration should make the various countries reap the benefits of economies of scale" (Shihab, 1992:99).

One of the more important advantages of the GCC is the creation of a much bigger market in the region (included about 19.8 million in 1988) which stimulates industrial development due to the absence of the advantages of the economies of the scale in individual countries. As the result of its large size, population and economic power, Saudia Arabia becomes the

dominant power within the GCC politically and economically. The membership of the GCC countries in OPEC and OAPEC has strengthened their cooperation in the exchange of information and know-how and the coordination of their legal systems in order to create a common petroleum market.

The future economic agenda of the GCC is to link the currencies of the member countries and the creation of the currency union. Beside that, the coordination of the exchange rate and the ultimate free movement of trade and capital between member countries are also seen as major future objectives.

### **1.3.1. STATEMENT OF THE PROBLEM:-**

The dependence of Gulf countries on migrant labour force has many impacts; economic, socio-cultural, demographic and political. Despite the huge investment in human resource development in the region, the participation of the nationals in the region's value added activities is still small. The reason behind this is the wide use of cheap migrant labour and the relatively high level of wealth which have led those nationals to be concentrated in non-productive employment; especially in trade activities. Nationals are being paid high wages as a right of nationality than in return for particular services and by that their remuneration is divorced from marginal productivity. As a result of that, dual labour market has emerged in which one segment for nationals and other more competitive segment for non-nationals.

The shortage of technically and professionally qualified personnel in GCC region is regarded as the biggest single constraint to development. For example, in Saudi Arabia, where the country has traditionally relied on Westers as top mangers, about 100,000 Europeans and North American are now employed in managerial and technical jobs (O,sullivan,1989:2). The reliance on foreign labour is well-established and apparently enduring. Three quarters of the Gulf labour force or 5.1 million people were foreigners (Robert, E. Looney, 1991:121) and migrant labour makes up at least 50% of the

region's work force. The dependency is also increased by the urgent need of the GCC region to build large military and security structures which has been stimulated by political uncertainties and risks in the region. Robert, E. Looney (1991:137) argues "Expansion of the armed forces was a fairly important source of employment during the period 1975-1980" and in UAE, as an example, "Military expenditures had replaced civilian expenditures as the dimension most highly correlated with development in the oil sector" (R. E. Looney, 1993:154).

Having said that, the paper will critically evaluate that dualism in which on one hand the governments intend to diversify the economy through industrialization and on the other hand labour policies tend to drive down the levels in education which intend to prepare nationals to enter industrial sector.

The building of sound industrial sector is regarded as strategic goal for securing incomes from non-oil sources in which benefits likely to be in distant future. Given this objective, economic diversification through industrialization has become a common agenda in the development plans of all GCC countries. The contradiction is that while industrialization processes require skilled, well-trained and professional manpower, which can be satisfied through migrant labour, most of GCC countries (due to socio-cultural, political and demographic factors) have started the replacement of migrants by nationals. However, beside highlighting the crucial role played by migrant labour in industrialization, this paper attempts to discuss the challenge that is facing the region in achieving a balance between these conflicting goals (a case study of UAE will be used). It is therefore the intention of the paper is to argue for a more efficient national participation in the labour market. Reasons for this are the following:

1. The nationals benefit much from huge government human capital investment schemes and by the availability of a wide range of skilled and qualified international labour force.
2. The decline in the oil revenues will induce GCC countries



to decrease their dependence on imported labour and to gradually replace the migrant labour force by the nationals. This replacement is not only argued on economic reasons but beside that there are other political, cultural and social factors in which in some GCC countries (Qatar, UAE and Kuwait) nationals are outnumbered by migrants but "Given the limited nature of and the constraints to the utilization of indigenous human capital, how can the capital rich states continue their programmes of rapid economic development and expansion without their nationals becoming a totally outnumbered minority in their own country?" (Bircks and Sinclair, 1980:110).

Diversification through industrialization has deepened the dependency on migrant labour because it requires highly skilled labour force which is not available in the region. "A society with an inadequate technological background, poorly planned technical education programmes for the small indigenous population and with an ambitious industrial expansion programme can easily lose the potential benefits of industrial and economic growth and increase the dependency on foreign experts and workers" (Sheikha al-Misnad, 1985:143). The dependency on migrant labour has not only drained the economic of the region, but also has created restrictions on the region's future plans for industrial expansion and development. Hence, in order to decrease the dependency on migrant labour, improving and upgrading the standard of technical, technological and scientific education; continuous HRD programmes and training; and encouraging productive participation of nationals in the labour force should be given the priority in the region.

### **1.3.2. OBJECTIVES:-**

1. Examine the magnitude, nature, origins and characteristics of different international labour flows in the region during the period of 1973-1990.
2. Analyze and discuss the role played by industrialization in achieving the objectives of diversification which aims to create new income resources beside oil and decrease the

damaging impacts of oil prices fluctuations in the region's GDP after oil prices collapse during 1980s. The paper will study achievements and problems of industrialization in the region and for close examination the case study of the UAE industrialization will be presented.

3. Investigate the crucial role played by joint ventures and partnerships, by presenting their dominance in the majority of the industrial activities in the region, in establishing industrialization in the GCC countries and hence upgrading skills capacity and transferring technology to them.

4. Critically discuss the obstacles that faced the region in creating a sound national labour force and for increasing national participation especially in manual and technical jobs.

5. Outline a national HRD policy that is consistent with the objective of replacing imported skills by national skills and with industrialization endeavour. In addition to that, the paper attempts to answer the question how it is possible to achieve the goals of (Gulfanization) of the labour force, reduce dependency on migrant labour and diversification of the Gulf economy simultaneously?

### **1.3.3. SCOPE AND THE LIMITATION OF THE RESEARCH:-**

This research will generally pay attention to the six Gulf countries which have been united in the GCC since 1981.

However due to the limitation of the length of the paper and due to the shortage of data concerning the region, firstly this paper will cover only the period of 1973-90 and secondly I will not be able to elaborate the full picture in each country. On the issue of industrialization only one case study (UAE) will be dealt with.

### **1.3.4. STRUCTURE OF THE PAPER:-**

The format of this paper is as follows. In addition to the first introductory chapter, the second chapter discusses various theories and concepts of the international migration and industrialization. In the third chapter, volume, trends,



nationality, structure and the impacts on the labour market of the international migration in the region will be evaluated. At the end of this chapter migration in UAE since 1973 will be represented. In chapter four, which dealt with industrialization in region, structure, types, objectives and the role in development of industrialization will be covered and for close examination one case study (UAE) will be used in chapter five. Chapter six will discuss and examine different problems and obstacles of creating sound national labour force and to analyze how alternative HRD strategies and programmes can be adopted in attaining the objectives of industrial development.

Lastly, I conclude with summarizing the issues that have been discussed in the paper and the prospects for these countries in the future.

**CHAPTER TWO**  
**CONCEPTUAL AND THEORETICAL FRAMEWORK**

**2.1. INTERNATIONAL MIGRATION:-**

International migration is defined by movement of persons from their countries of origin to other countries motivated or forced by different economic, social, cultural, religious or political factors. It becomes a global issue due to the continuous increase in the supply of the immigrants from lower to higher income countries and their impacts on the receiving countries. The increase of international migration is resulted from "declining real costs of migration (information and transportation), increasing population pressure in many sending countries, the removal of racially biased immigration restrictions in several receiving countries and a large flow of refugees" (Barry and Paul, 1985:674). Although migration has been situated in the centre of the present international economy, this phenomenon "has never received from the pure theory of international trade more than a small fraction of the attention lavished on the theory of international capital movements" (Ethier, 1980:56).

It has been said by Bohning (1984) that "the history of mankind is the history of migration" because migration is highly related to social change and development "Roving behaviour..... had an important role in human evolution. Human kind could not have become the earth-girdling, dominant species we are without the migration that followed successful discovery of new possibilities made manifest by such moving" (McNeil, 1978: 3).

**2.2. NEOCLASSICAL APPROACH:-**

This school argues that migration takes place due to the differences between the real income at home and abroad and hence, through migration, people will earn higher return on their labour than at home. According to this theory, there are three models for explaining migration from one country to

another; first the gravity of distance models, second the probability or transition matrix model or the so called sociologically explained chain migration and third the pull-bush (cost-benefit) models which based on differences in international differences in economic variables (wage rate differentials or unemployment rate differentials). In empirical studies, the last model has been more used in the context of international labour migration than the other two models which are rather descriptive and not explanatory.

E.G.Ravenstein (cited in Hamberg, 1976:5), who was one of the first to attempt to formulate theoretical framework to explain migration in 1880s, concentrates on the economic factors as the central driving force for migration "oppressive laws, heavy taxation, an unattractive climate....., all have produced and are still producing current of migration , but none of these current can be compared in volume with that which arises from the desire inherent in most men to "better" themselves in material respects". To confirm the roles played by economic pull factors which are encouraging and motivating migration to the USA, Jerome Harry compared chronological data of immigration from various countries to USA. He founded that economic pull factors (and not bush factors) in the USA played the major role in that migration.

Alejandro Portes has added to economic factors other reasons such as natural diseases, political, cultural, religious or social oppression, to obtain social status or to improve conditions for the children.

Instead of concentrating of either push or pull factors for migration and in order to construct a comprehensive migration theory, it is important to view both home and receiving countries as a whole acting together. In this concern and to formulate a migration model which includes major factors behind the decision and process of migration, Evertt, S.Lee has listed four groups of factors; 1. factors correlated to the home countries; 2. factors correlated to the receiving countries; 3. obstacles factors (e.g. distances, institutions, restrictions....etc); and 4. personal factors.

Stark (1984) has argued that while the income differences has great importance in illustrating migration, this differential can not represent the only key variable for that migration. He adds to income differentials additional motives depending on three factors; risk aversion (because concentrating on income differentials neglects the cost of migration); relative deprivation and asymmetric information (lack of infirmations about conditions in the country of immigration).

In using the neoclassical approach of migration to illustrate international migration flows, according to Bhagwati, we have neglected "the fact that the former is generally free where as the latter is constrained by controls..... one can not begin to analyze international migration unless one first under stands the immigration control system pertinent to any given parametric situation" (Bhagwati, 1984:678-679).

Due to the prevalence of immigration restrictions in immigrant countries, demand determined approach has appeared. According to this approach, beside the existence migration willing workers, the opportunity to emigrate depends on the demands for migrant labour and immigration restrictions "For contemporary international migration to occur it is necessary and sufficient that, first, there is a demand for foreign labour in the immigration country, and, second, that there are no immigration restriction to prevent the immigration of active foreigners" (Thomas, S. 1985:844).

### **2.3. HUMAN CAPITAL APPROACH (INVESTMENT THEORY):-**

International labour migration is regarded according to this theory as the result of international differences in the present value of the sum of all future net gains from either staying at home or from migrating. The migration decision will be taken if the sum of the expected future real gains, which have been discounted into present value, is higher abroad than in the home country.

Migration phenomenon is treated here as a business which is costly for the person and there are a minimum three types of costs that associated with migration: 1. the travel cost 2.

supporting oneself costs while seeking employment in the host country 3. the psychological strains costs of being away from family, friends and cultural and social surroundings. This school regards migration decision as an economically fully rational decisions that includes both losses and gains and it requires investment (in capital and time) for the migration process it self before benefiting from it.

On the contrary to the neo-classical theory, this model includes the probability of being unemployed for migrant in order to balance the risk against the positive income differentials. According to Todor model, "a migrant considers the various labour market opportunities available to him, choosing the one that maximize the discounted present value of the expected net gains of his labour. the migrant all the futures expected gains by the differences in the real income, multiplied by the probability of a new migrant measures obtaining a higher paid abroad and discounted with a rate reflecting his degree of time preference over his time horizon" (Todoro cited in Thomas,S. 1985:845).

#### **2.4. CONFLICT SCHOOL:-**

This school argues that international migration is a structural component of the contemporary world economy due to the penetration and incorporation of the migrant labour sending countries into the capitalist world economy. Demetrios, G. (1984:412) argues "Emigration is fueled further by the penetration of the capitalist mode of production in, and the subsequent monetization, of traditional agriculture. This development displaces agriculture labour .... the key structures of the peripheral states are remoulded to fit external demands and the resulting structural imbalances promote emigration".

Migration, according to this school, is not only motivated by external factors (income differentials) but also forced by internal factors in which capitalist system, incorporation with the state, penetrates internal institutions and hence creates sectoral imbalances in most developing countries.

Through introduction of modern (wage) modes of production, this school argues, abundant supply of labour in the periphery has been regarded as a reserve army which can be exploited to keep the general wage rates down and more important can also be used to moderate and reverse many gains (wages and working conditions) of the indigenous labour force which made through their organizations. On contrast to neoclassical school, which concentrates on rational calculus and economic gains, this school gives the socio-political structures, through which migration occurs, more attention and hence by " the identification of the forces that shape the decision to migrate, we have come to full circle to the point where the slightly modified positions of the classical and conflict schools could converge" (Ibid p.414).

#### **2.5. INDUSTRIALIZATION:-**

Industrialization, for economists, is the significant process through which developing countries, which suffer from backwardness and poverty, can adopt to increase their per capita incomes and improve and promote the standards of living of their population. Tom Kem (1983:1) argues "The nations which are rich and profound possess a technologically advanced industrial base, capable of turning out a large volume of manufactured goods. Nations which are poor and dependent have little or no industry and are primarily agricultural" and generally incomes are noticed to be higher in countries where contribution made by manufacturing industry is greater. Industrialization is not only a technical transformation but on the contrary it is a repeatable phenomenon with certain characteristics and which reflects (and interacted with) various geographical, historical, economical, cultural and social factors. For example, historical factors are important for industrialization because it is impossible task to understand the economy (and industrialization) of a particular country without understanding the conditions through which the country is linked to the world market because most developing countries are locked into world market in a dependency role as

producers of primary products according to world division of labour which has been adopted in colonization periods (core-peripheral relations). Undoubtedly industrialization is highly related to the economic dependency and self-sufficiency as observed by (Myint, 1973) who denies the traditional free trade doctrine which based on division of labour that articulated to comparative advantages in various countries.

Industrialization rationale differs from one country to another in developing countries. Generally, the reasons of industrialization can be grouped as follows: 1. creation of job opportunities 2. satisfy the local demands in manufactured goods 3. maximize the GDP and increase saving from growth of manufactured products exports 4. avoiding the instability and the fluctuations of the primary products prices in the world market 5. increasing the living standards of population 6. rationalize the scarce foreign exchange that pended for imports 7. transfer of technology and know-how and their diffusion impacts from industrial sector to other sectors in the economy. Ballance and Sinclair refer to the difference between industrialization in developed and developing countries "the motives for highlighting industrial growth in LDCs are different from DCs. To formers domestic considerations are more relatively important than international ones. Industrialization in LDCs has been pursued, for political as well economic reasons, to provide balanced growth" (cited in Al-shamsi, 1992:3).

There are three major elements of industrial strategy, according to Pack and Westphal (cited in Ibid p.2), firstly the choice between (ISI) and (EOI) industrial strategy, secondly, the state's role to choose between a market-directed or centrally-planned industrialization and thirdly, the determination of finance priority (public vs. private or domestic vs. foreign finance). To build a sound industrialization, more attention have to be directed to the specific circumstance of the country (capital, suitable technology and human resource development). The choice between (ISI) or (EOI) strategies is of high importance as (Maqueen,



1973:107) states "the industrialization is a necessary part of development for most LDCs is beyond dispute and, as the experience of Taiwan and Pakistan in recent years has shown, the right kind of industrialization can also expand export earnings much more stable basis".

## **2.6. INDUSTRIALIZATION AND SMALL COUNTRIES:-**

Most of the developing countries which have been achieved a major industrialization efforts since the end of the Second World War are noticed, with exception cases such as Hong Kong and Singapore, to be medium or larged-sized population countries (they have population of more than five million). The smallness of a country has four main effects on its industrialization possibilities (Helen, 1984:90). Firstly, most of the small countries have limited choice and opportunities for (ISI) strategies. Secondly, the exploitation of internal or external economies of scale in production (which including sales and marketing) are restricted by labour force size and the capacity of absorbing migrant labour and beside that the smallness of the internal market also affects industrialization. "Thirdly, the choice of techniques of developing countries is strictly limited to those appropriate to their level of development and productivity ..... But, fourthly, the very limitations that smallness imposes have offsetting advantages in policy formulation and implementation, which if properly exploited, can make industrialization in small countries remarkably successful.". Industrialization in small countries is also constrained by the shortages of skills and technology as the result that such small country can not "expect to have all the expertise it needs on a continuing basis even when it reaches a high level of development. Nor can it expect to use all the experts it has trained because the continuing change that take place in technology, trade and consumer taste" (Ibid p.93). Relatively rich small countries (such as GCC countries) have afforded to overcome these obstacles by importing a large variety of skills (migrant labour) and advanced technology to allow their



industrialization move into export market. The creation of regional market by various small countries is regarded as one of the essential steps to stimulate industrialization by increasing the market size. In addition to that, to avoid protectionism in the world market, small countries can promote and develop their trade with other developing countries. Moreover, regional cooperation has other advantages such as in training, consultation, freight services and unification of services.

Kuzents (1960), argues that one of the major advantages of smallness has been lied in the political of cohesion where it becomes easy for government (through joining the interests of the society's various groups) to lead the country towards industrialization by overcoming the natural resources obstacles by persuading the nationals towards industrialization more quickly than many large or medium-sized countries.

**CHAPTER THREE**  
**TRENDS AND IMPACTS OF INTERNATIONAL MIGRATION IN**  
**THE GULF**

In this chapter volume, trends, patterns, structure and nationality of immigrant labour flows to the Gulf since oil prices rises of 1973 will be presented. The impacts of the Gulf War on migration will be discussed. Moreover, the major characteristic of the whole GCC economies which is the dependency on migrant labour will be examined.

**3.1. THE EVOLUTION OF MIGRATION IN EARLY 1970S:-**

Bahrain was the first to discover oil in 1932, Kuwait in 1938, Qatar 1940, UAE (Abu Dhabi in 1958 and Dubai in 1966) and Oman in 1963. By the increasing of oil revenues in early 1960s, the development process in the region started and hence the needs for external labour emerged "it was in the early 1960s that the flow of Arab workers from the non-oil-exporting countries to the oil-rich states of the Arab Peninsula ..... began to increase significantly..... The number of Arab migrant workers grew steadily, in step with the development during the 1960s and early 1970s, but remained much smaller than the present day totals. Although the fundamentals of the migration system were well established, it was less active than in the mid-1970s." (Birks and Sinclair, 1980:25)

It was estimated that the number of migrant workers in the GCC, which was (800,000) before 1973, was doubled by 1975. This attributed to the oil prices rises of 1973 which changed the development structures of those countries. The huge increase of the financial resources by the oil revenues has allowed the region the opportunity to begin massive development programmes to transform its societies into modernity era. This development has been noticed to follow the upwards of oil prices and oil revenues. These countries spent extensively during that period in various development programmes such as in infrastructure, social services, welfare

programmes and primary industry which has been stimulated by cheap energy. Networks of modern roads, multi-storey concrete buildings, large number of schools and universities, hospitals, electricity stations and several airports and harbours were constructed. This tremendous construction was regarded as the starting point of the migration in the region due to the incapability of the local labour market to offer the required labour. The indigenous labour force were small (the total populations of Kuwait, Qatar and UAE together in 1975 were about 1 million and for larger population Saudi Arabia was 5.6 million) and they lacked the required technical skills to carry out the development plans. In addition to that there are other factors which decrease the crude participation rates of the populations in the labour market: low participation of women; youthful structure of the population and high education enrolment. Table 1 represents the migrant workers in GCC in 1975. According to the table, the first flow of migration to the region in early 1970s was dominated by Arab migrants (71.2%) while Asians represented (19.8%) and European and Americans comprised only (2%) and the rest of the migrant came from Iran, Turkey, Africa and other areas. Under one-half of all migrants worked in Saudi Arabia on contrast to smaller economies of Bahrain and Qatar were only 5% of all migrants worked (Table 1). Beside that, due to its size and its huge financial resources, Saudi Arabia included the majority of Arab migrants and because until 1975 it gave preference to Arab migrants than other nationalities and hence by common border with Yemen and Jordan it afforded to attract the best qualified migrants.

In that period Egypt was the most important country of origin of migrants and it comprised over 30% of the total Arab migrant labour in 1975. Beside Egypt, the two other major countries in exporting labour to GCC countries were Yemen (22% and concentrated in Saudi Arabia) and Jordan (20%). Other Arab countries (Syria, Lebanon, Tunisia and Sudan) were participated at a lower rates.

Although by 1975, some of the construction projects were being

finished, the labour market attracted new migrants. This due to the departure of the Iranians and Iraqis from the region attracted by the development in their countries. In addition to that, the growing industrial sector increased the pressures on Arab countries to export more migrants. Major labour sending countries (Egypt, Jordan and Yemen) were failed to match labour requirements in GCC countries. According to (Ismail, S. et el 1983:48), "The proportion of Jordanian (and Palestine), Omani and Y.A.R. workers abroad was close to one-third of the total in 1975. The Syrians, Egyptians and Sudanese abroad, although a smaller proportion of their total national workforce and rising in number, could not keep pace with the increasing demand for labour". As the result of that and in order to secure labour requirements, GCC countries started the importation of labour from outside Arab World. Beside that, political reasons have extensively influenced the importation of Asian labour and "oil rich states can favour temporary workers from Pakistan or Bangaladish to further Pan Islamic goals and reduce dependence on Arab workers from particular political systems (such as Palestinians, Syrians or Egyptians) (Kritz and Keely, 1981: 16).

### **3.2. CHANGE IN IMMIGRATION PATTERNS: ASINIZATION OF MIGRANT LABOUR:-**

During the early 1970s Asian migrant labour in GCC countries constituted only 20% of the total and they concentrated in UAE where about one half employed there while Saudia Arabia included one-tenth and fewer were founded in other countries. Indians and Pakistanis represented the majority of them while the rest included Malysians, Nepalese, Filipinos, Thais and Koreans. The rate rose to reach 45.7% in late 1970s and during this period the contribution of the Arabs fell substantially from 51% of the total to less than 42%. In addition to the previous mentioned factors, this shift was attributed to the cost effectiveness and relatively organized structure of the Asian migrant labour. This was accompanied with the change in employment policies in some GCC countries (e.g. Saudia Arabia

after 1975) to prefer Asian labour. As the result of that, by mid 1980s there were between two and three million Asians workers in the region with Pakistan and India each with 800,000 migrants (Demery, 1983).

Most of the Asian countries (especially South Asia countries) encourage this migration and they have facilitated the flow of migrants to the region because they "relay heavily on remittances from the Middle East (currently totalling about \$ 4 to \$ 6 billion annually) for precious foreign exchange. Labour migration has also been viewed as providing a safety valve for wide spread unemployment and underemployment in the sending countries" (Fred, A and Nasra, 1984:294).

Table 2, which represented the annual labour migration between 1975 and 1983, shows huge and continuous annual outflow of Asian migrants during that period. It has been found that workers from South Asia have been found in all GCC countries while those from South East Asia have concentrated in Saudia Arabia where (80% of land-based workers from the Filipinos, 68% of Korean workers and 85% of Thailand workers) (Ibid).

The majority of the Asian labour migrants are males (aged between 20-35 years old), better educated and from rural origin. The only exception is the Filipinos migrant labour where about 20% to 30% of them are women. The general difference in the pattern of migration to the GCC between Korea and other Asian countries is that migrants from these countries move to the Gulf in individual bases while in Korea case the firms are responsible for the contracts and choose and organize their workers through oriental migration system.

For the migration benefits, according to (Kim and Lee, 1983) the average migrant contract Asian worker make about 5-6 times as much as he receives in his country with the exception of Koreans who have relatively high domestic wages. At the national level, Asian labour sending countries gain highly from the remittances which have been illustrated in Table 3 which shows the remittances in relation to merchandise exports and GNP in selected Asian countries in 1980-81. The remittances are regarded as an important foreign exchange

source and "For the newly industrialized countries (NICS), the Middle East's need for intermediate technology for the 1980s coincides with Taiwan's and South Korea's domestic economies shifts toward technical and capital-intensive industries" (Huan-Ming, 1984:23).

### **3.3. DEPENDENCY ON MIGRANT LABOUR: AN OVERVIEW:-**

Compared with industrialized countries, the crude economic activity rates of GCC countries are low (where in industrialized rate the crude economic activity rates exceed 60%). The figures in the Gulf are: 25.7% in Saudi Arabia, 32.9% in Kuwait, 30.8% in Oman, 34.5% in Bahrain, 53.7% in Qatar and 54.7% in UAE (Looney, 1991:131). In 1985 while the indigenous population represented only 40% of the total population, the participation of the nationals in the labour force (Ibid p.123) was about 21.4% (21.4% in Saudi Arabia, 18% in Kuwait, 16.5% in UAE, 24.6% in Oman, 25% in Bahrain and 19% in Qatar). The distribution of the nationals in the workforce in the whole GCC is as follows: 71% in Saudi Arabia (dominates the GCC in domestic labour force), 15.2% for Oman, 6.3% for Kuwait, 3.6% for Bahrain, 3.1% for UAE and 0.8% for Qatar (Ibid p. 122).

The economies of the GCC countries are dependent on the migrant labour (44% in 1975 rising to 57% in 1985) and this dependency has occurred even in the service sector where nationals participation is high. In Table 4 the share of employment by economic sector between 1975 and 1985 is presented which indicates the continues dependency on imported labour. According to (Ismail, S. et el, 1983), the largest proportion of the migrant labour in 1975 was employed in construction (35%) of the total while the next largest proportion were in services (29%). Trade and finance employed (14%), utilities and mining less than (2%), agriculture and fishing less than (6%) and the rates of manufacturing and transport and communication were (6%) and (7%) respectively. The share of construction decreased sharply in late 1970s due to the completion of the most intensive construction phase and

the beginning of the economic diversification phase where demands for skilled labour has been increased for industrialization, operational and maintenance activities.

The rates of migration in the GCC have been highly affected by the expenditure on the construction sector and "After reaching a peak of \$ 37.5 billion in 1982, the value of contracts awarded in the six Gulf countries dropped to an estimated \$ 15.8 billion in 1985 and looks set to continue downwards" (H.T. Azzam 1988:106).

For the comparison between nationals and migrants in different sectors employment during the same period, migrants tended to dominate two sectors construction (their share was 79%) and manufacturing (67%). For example, in Qatar's manufacturing sector in 1975 99% was dominated by migrants and the same for 98% of the construction sector in UAE and 95% in 1985. For the same periods the service sector, where nationals expected to be highly participated, was also dominated by migrants 83% for Qatar and 84% for UAE. The agriculture sector, which poor in the region, also attracts migrant labour in Oman in which migrant rates increased from 16% in 1975 to 20% in 1985 and also in UAE migrant labour participates in agricultural activities. According to (ESCWA 1992), the average percentages of the migrant labour in the total labour force in all GCC economies during the previous two decades were estimated as follows; 46.5% in 1975, 65.2% in 1980, 70,2% in 1985 and 67.7% in 1990 (the percentages of migrant labour in the total labour force in 1990 for individual countries, according to ESCWA, will be presented at the end of this Chapter 3.7). Migrant labour participate highly in both public and private sectors and according to (J. Addleton, 1991:510), "In Qatar in 1987, for example, hardly 40% of all government employees were Qatari. In Oman, only 60% of all civil servants were Omani. Through out the 1980s, at least half the teaching staff at Saudi Universities came from outside the country. Foreigners were represented in local military and police forces in countries such as Kuwait, Oman and UAE."

The occupational characteristics of migrant labour in 1975 was



dominated by unskilled category (Ismail et al, 1983) and both unskilled and semiskilled occupation represented two-thirds of the total migrant labour. The professional and non-professional groups represented 16% while skilled office and manual workers were together 17%. In 1985 the requirements for professional, sub-professional and skilled technical workers increased highly by more than 100% and "Among all professional and sub-professional occupations, the share accounted for by migrants rise to 71%, while their number increases from 256,000 (1975) to 794,000 (1985)" (Ismail, S. et al, 1983:83). For example, in UAE the migrant labour was accounted for 95% of professional and technical occupations in 1975 and about 98% in 1985. Table 5 presents the skill profile of the labour force in Kuwait in 1975 and 1980 compared. The figures in this Table indicate the domination of migrant labour in all occupations where the percentage of migrants in the total labour force in different occupations ranged between 49.4% and 85.5% in 1975 and between 59.5% and 92.4% in 1980. The table also shows the concentration of Kuwaitis (which general phenomenon in all GCC countries) in the service occupations (37.8% in 1975 and 36.3% in 1980) and the high concentration of migrant labour in technical and professional occupations (76.7% and 79.4% of the total labour force in 1975 and 1980 respectively). Sheikha al-Misnad (1985:140) also uses the example of Kuwait, where higher national participation is expected, to illustrate the serious and acute problem of poor participation of the nationals in the labour force in various economic sectors. By conventional methods of occupational classification, the 1980 census showed that 36% of Kuwaiti participated in service sector and 24% of them participated in clerical and related works. The participation rates between Kuwaiti and non-Kuwaiti in technicians, skilled and semi-skilled office workers and skilled and semi-skilled manual workers occupational groups are in the order: 1:2.49, 1:1.81 and 1:5.96 respectively. The employment comparison between nationals non-nationals, on the basis of academic, professional and technical qualification in 1975 indicated



that only 17% of the nationals who were working in professional fields were in jobs which require a university degree in science and mathematics. The ratio of Kuwaiti to non-Kuwaiti was 1:8.6 in jobs that require science or mathematics-based university degrees and 1:0.9 in jobs that require art-based degree.

The restructuring in the occupational structure of the migrant labour in the region is stimulated by the expansion and the rapid economic growth of the economies of the GCC countries after the completion of the construction phase. In addition to that, during early and mid-1980s these countries have witnessed a high shift towards the usage of high order of technology which by turn increase the share of the skilled category in the total migrant labour. Robert E. Looney (1993:37) argues that in 1975 migrant labour dominated construction and manufacturing sectors where their shares were 79% and 67% respectively. During the period 1975-80. migrant labour began their domination of the industrial sector and "there was little relationship between the relative expansion in domestic workers and the manufacturing sector." (Ibid p.43). In the period of 1980-85 migrant labour was responsible for the expansion of the manufacturing sector while their participation in construction sector had declined. In recent years while nationals have concentrated their participation in service sector, the manufacturing sector has witnessed a total dependency on migrant labour.

#### **3.4. THE THIRD SHIFT IN IMMIGRATION PATTERNS:-**

The migration phenomenon in the region is characterized by its circulatory nature of the migrants flows origins. The first Arab migrant labour wave was replaced by South Asian migrants flows from India and Pakistan in the mid-1970s. The third shift of migrant recruitment occurred in the late 1970s when the East Asian migrants have began their migration to the Gulf. From the 3 million Asian workers in the region in 1983, the South East Asian migrants increased from 6% in 1975 to about 29% in 1983. For example, Philippine migrants, 70% of

them work in Saudi Arabia, increased from 7,813 in 1976 to 323,000 in 1983 (Jalyal al-Dean, 1985). The circulatory structure of migration in the region is presented in Table 6 which shows migrant worker communities in GCC countries during 1975 and 1985 compared. One of the major factors behind that, according to (Huan-Ming, 1984), was the unrest and the protest of South Asian workers against poor working conditions and wage inequalities in Bahrain (1974), Saudi Arabia (1976) and Dubai (1977). Due to that, GCC countries have altered the nature of migration and applied "work camp" system which restricted the labour force to their projects. In the mid-1980s the number of East Asian migrants in the region was more than one million workers most of them employed on "oriental labour system".

### **3.5. THE ORIENTAL LABOUR SYSTEM :-**

The structure of migration to GCC countries has been restructured since 1975 upwards. One of the major change has been the introduction of the oriental workforce system. Oriental labour is a major characteristic of the GCC industrial development which being based on enclave type of development where migrants are separated from nationals "The contracts awarded for the building and subsequent operation of these major contractor or consortium supplying all the expertise and labour force. The labour force lives within the enclave on work camps, but more permanently than is usually the case" Bircks and Sinclair, 1980:132). The migrants from the oriental countries (East and South Asia which include Indonesia, Kampuchea, Korea, Malaysia, Taiwan, the Philippines and Thailand) to the region rose from 0.5% in 1970 to 12% in 1978. This high shift is attributed to the social and economical advantages of the oriental labour system. Most GCC countries have applied this system to decrease the political, social and psychological effects of the huge migrant labour on their indigenous populations having the fact that populations of Qatar, UAE and Kuwait are minorities in their own countries. The general aim of this system is hence to decrease

the direct contact between nationals and migrants "they (migrant workers) have caused problems, and have had an effect on life, on traditions, on every thing and that the United Arab Emirates plans to establish labour camps out side towns and cities to house migrant workers" (Ruler of Sharjah cited in Ibid p.111).

In that way, planners in GCC have separated the new established industrial areas from the urban areas to minimize the cost of migration on national societies. South Korean companies, for example, train their workers in special schools for overseas employment beside the three years military services that applied in Korea which would accustom migrants to rigid life in "work camp" in the Gulf.

Oriental labour system has offered the opportunities for multinational corporations from Korea and Taiwan through "work camp" to enter the region as we will see in the next chapter. However, Japan was the first to introduce this system in the mid-1970s when "In 1977, Taikie Dengyo Kaisha, a leading Japan power-generating and petrochemical plant firm, recruited South Korean, Taiwanese and Filipinos to work on Middle Eastern projects" (Huan-Ming, 1984:22).

The examples of these enclave industrial areas which have been built in the desert are: Ruwais (Abu Dahbi); Shuaiba (Kuwait); Jebel Ali (Dubai); Umm Said (Qatar); Yenbo and Jubail (Saudi Arabia). To minimize the cost of running these plants "there is a clear trend towards the recruitment of single unaccompanied males to build them and, subsequently, also to run the plant. The industrial areas can therefore be operated on a "work camp basis", with only a minimum amount of services being provided. Thus social and infrastructural overheads are minimized" (Ibid p.111).

#### **3.5.1. DRY DOCK PLANT IN BAHRAIN:-**

This plant represents an example of earlier oriental migrant system in the GCC region. The Korean company, which won the \$ 30 million contract, built the Arab Shipbuilding and Repair Yard Company's facilities. Here, the Korean company provided

the whole workers (single men), food and recreational facilities directly from Korea. They built their own housing facilities and working 12-hours shifts. by completion of the construction of the dry dock they left Bahrain. The location advantage of the plant in the gulf is greatly reduced by competition from the large and nearby Dubai Shipyard and Dry-Dock which was established almost simultaneously with the Bahrain's Dry-Dock (R.E. Looney, 1993:158). The \$ 484 million Dubai Dry-Dock is regarded as the largest Dry-Dock in the world with the capacity to accommodate a one million ton oil tanker.

### **3.5.2. JEBEL ALI PLANT (DUBAI):-**

This is an industrial area which has been isolated from the city of Dubai (UAE) and the main reason behind that enclave development is "the sheer volume of labour required for Jebel Ali. Estimates of the number of the workers that will be required at all levels in 1985 are equivalent to the entire population of Dubai in 1977..... The development of other facets of the country's economy would be severely distorted if development of the of Jebel Ali were not isolated from the labour market at large" (Bircks and Sinclair, 1980:112). To illustrate this scenario a comparison between the total population of Dubai and labour force needed in Jebel Ali industrial area is presented in Table 7.

By this enclave development, Dubai has been afforded to establish modern industrial complex with huge labour force and simultaneously it minimizes various social and labour market side-effects of that project on Dubai and on UAE in general by the influx of migrants. Like the experience of the Dry Dock of Bahrain, the oriental companies have provided their workforce and skills which have been needed in the construction of the plant and the related infrastructure. The operation phase of the plant has not changed from the construction phase in term of separation the labour market of Jebel Ali from Dubai and UAE labour markets.

The experiences of the Ruwais industrial area and Yenbo and

Jubail are similar to the previous examples but in Yenbo and Jubail case the running and the operation of the plants are done by Saudi manpower.

### **3.6. COMPETITION BETWEEN ARAB AND ASIAN MIGRANTS:-**

Oriental companies in the GCC countries have acquired good reputation due to their cheap costs (cost effective) and efficiency in meeting dead lines in the completion of the plants. Moreover, Socio-cultural and political factors are also playing a role in preferring oriental labour on Arab labour because the enclave packages "minimizing the difficulties to indigenous planners by virtue of their preparedness to live in enclave developments and to return home after the contracts are fulfilled. They therefore offer overriding social advantages as a source of labour for which a knowledge of Arabic is not essential" (Bircks and Sinclair, 1980:113).

In contrast to early 1970s where Arab were preferable, various factors: political factors (e.g. the consequences of the invasion of Kuwait in 1991); socio-cultural; linguistics and geographical location factors came to play smaller role in migration labour choice.

In gaining the "package style" contracts in GCC region, Asian migrant labour is characterized by cost-effectiveness, efficiency and over-supply in various skills profile where "it is hardly possible to collect, organize and export from any Arab state a group of workers who possess the skills of the Asian work force..... and prepared to live in an enclave under work camp conditions..... it would be difficult for Arab contractors to compete with East Asians, because enclave contracts in their early stages require.... also export of capital from that state" (Ismail,S, et el, 1983:50-51).

On the income level, Shugair (1985) in his study on the private sector of Bahrain concludes that Arab employee earn Bahraini Dinars (B.D) 360 while Indian or Pakistani earn in the same job B.D 130, a South Asian (Korea) B.D. 194 and the European B.D. 851. In Kuwait, the average incomes of the same

nationalities in 1982 in Kuwaiti Dinars (K.D.) were K.D.198, K.D.85, K.D.161 and K.D.765 respectively.

It has been noticed that most of the Asian migration flows, on contrast to the Arab, have been occurred through organized structure (recruitment agencies and private agencies). Moreover, Asian companies owned in late 1970s about 53% of the contracts in the region and for economic, cultural and communication reasons they preferred to recruit migrant labour from their home countries. Beside that it has been argued that Asian workers are easier to be managed and controlled than Arab workers.

### **3.7. THE IMPACTS OF GULF WAR ON MIGRATION IN 1990S:-**

Despite the fact that the total population of the GCC countries in 1990, which about 20 million, represented 0.4% of the world population, GCC region included (7 million) 10% of the total migrant labour in the world which about 70 million (ESCWA 1992). For example, the total number of migrants in mid-1991 in Saudi Arabia was estimated at 4.563 million which represented 33% of the country's population and 24.2% of the total GCC population (Raffer and Salih, 1992:2). the percentages of the migrant labour in the total labour force (ibid) in 1990 was estimated as follows; 91.6% for Qatar, 89.3% for UAE, 86.1% for Kuwait, 70% for Oman, 59.8% for Saudi Arabia and 51% for Bahrain.

On the eve of the Iraqi invasion of Kuwait on August 2, 1990 there was approximately 5.1 million migrant workers in the Gulf. By adding the accompanying families and children to migrant workers the number increased to about 7 million migrants. In Kuwait "At the time of the invasion, 60% of Kuwait's population of just under two million were foreigners, and the non-Kuwaiti made up around 83% of the total workforce. In some sectors, such as construction and manufacturing, virtually all workers were foreign.....In fact, by 1985, there were considerably fewer (4,692) Kuwaiti workers in manufacturing than before oil price increases (6,109)" (R. E. Looney, 1993:198). On contrast to Iran-Iraq War which did not



have a direct adverse effect on migrant structure in the region, the immediate impact of that invasion was the evacuation of several hundreds thousands migrants from Kuwait and Iraq to their home countries. Beside that about 800,000 Yemenis and a number of Jordanian, Sudanese and Palestinians returned home with a total number of about 2 million of these four nationalities. The political polarization in the Arab world during the War on Iraq side or Kuwait side has affected the Arab migrants (from Sudan, Jordan, Yemen and Palestine) in the region to be more looser from the crisis than Asian migrants where GCC countries used employment opportunities as a political tool. J. Addleton (1991) argues that one of the direct impact of the Gulf War will be a continuous reduction of Arab in total migrants to reach at the end of 1990s to 20% of the total migrants in the region.

This crisis has created important restructuring in the region's labour market in which due to the development investments reduction, new recruitment of migrants has been affected and due to political factors Asians migrants are benefiting at the expense of Arabs because all pro-Iraq nationalities have been restricted from being recruited in the Gulf. Moreover, GCC countries emphasis on the reduction of the overwhelming rates of migrants especially in the key economic sectors by adopting new restrictive migrant employment policies which favour less politicized groups (as from Philippines, India, Korea and Sri Lanka).

### **3.8. MIGRATION IN THE UAE:-**

The federation of the UAE was established in 1971 and it includes Abu Dhabi, Dubai, Sharja, Umm Al-quwain, Fujairah, Ajman and Ras Al-khimah. Although UAE had in 1982 the world's highest per capita income estimated to about \$ 23,770, its economy regarded as underdeveloped due to its dependence on the export of one primary product which oil.

UAE started labour importation in 1970 where a small number of workers at all skill levels was imported and out of the total (44,246) 81% of them were Arabs with Egyptians represented



33% of them (Abdelmegid, M. Farrag, 1975:105) and at that period migrants equalled 22% of the total population. The massive socio-economic development that followed the oil prices increases of 1973 led the country to import approximately all its labour demands (the total migrants number in 1975 was 251,000) and despite Arab still represented the majority, this period witnessed the importation of workers from South Asia (India and Pakistan) due to socio-cultural and economic factors. By the end of 1975 UAE became the leader in South Asian labour importation in the region (labour demand outstripped Arab supply and Asians accept lower wages) employing 45% of all Asians in the Gulf and they represented 64% of its total labour force. The "oriental labour" system led Asian labour to dominate most sectors of the country's economy by 1980. East Asians from Korea, Taiwan, Thailand and the Philippines through "package system" were imported to the UAE where large-scale industrial development contracts (e.g. in Jebel Ali in Dubai) were increasingly won by firms from those countries. During the period of 1982-88, the decrease of oil prices had affected the character of labour migration where regulatory schemes and migration restrictions were adopted to force the employment of the nationals. The structural changes in the economy, in which diversification through industrialization was began, had shifted the migrant labour demands from unskilled to skilled labour which needed in the growing industrial sector after the completion of the infrastructural phase. According to (ESCWA), the migrant labour represented 91% of the total labour force in 1990 which represented the largest proportion of migrant workers to total labour force of any GCC countries. The dependency of UAE economy on migrant labour has been increased over the last decade. For example, Qatar's proportion of migrant labour to total labour force in 1983 was 85% and 89% for UAE. By 1990, Qatar's migrant workforce decreased to 81% while that of UAE increased to 91%.

By the end of 1993, the total population of UAE was estimated to be 2,3000,000 (Dryland Consultants, 1994:27). During the

same period the total migrants was 1.750,000 which included working expatriates and non-working dependents which constituted a substantial amount. The distribution of migrants in various emirates in 1993 is presented in Figure 1. Figure 2, which shows the expatriates nationalities, indicate the domination of Asians migrants (especially Indian and Pakistani) compared with Arab migrants who represented only 17% of the total migrant labour.

**CHAPTER FOUR**  
**INDUSTRIALIZATION IN THE GULF**

This chapter is an attempt to examine the role of the industrial sector in GCC economies especially after diversification policies have been taken place. The objectives, investment and the impacts of the joint venture system on the industrialization of the GCC region will be covered in addition to analysing the major industries in the region. Lastly, problems of industrial sector which handicap the future prospects of that sector will be discussed.

**4.1. WHY INDUSTRIALIZATION IS NEEDED IN THE GULF?**

Industrialization in the region is situated at the heart of the development plans and strategies aiming for economic diversification and the creation of the alternative income resources beside oil resources to decrease the weaknesses that arise from an economy which largely dependent upon one type of export (oil). Industrialization in the Gulf, according to Kubursi (1984), plays a crucial role in the development of the region through: firstly, the creation of more diversified and balanced-income generation economy which depend on more than one resource, secondly, it increases the value-added of oil and gas by industrialize them rather than crude-oil importation, thirdly, it develops and promotes the education and training levels of the national labour force. The fourth advantage is the transfer of technology and the creation of the indigenous technological capabilities through the adaptation and development of the machines and production techniques to suit the local industrial environment of the region. Beside that the availability of large quantity of associated gas that accompanied the oil production can be regarded as a comparative advantage because it can be used as a cheap source of energy or can be used as feedstock in various industries. According to Looney and David, W. (1992:582) "in 1990, 92% of the total exports from Oman, 92% from Kuwait, 91% from Saudia Arabia, 84% from Qatar, 78% from Bahrain and 68% from UAE were

in the form of crude oil or refined oil products exports". Due to huge oil prices fluctuations, which have been reflected in oil revenues reduction, the need for diversification of revenues in GCC, through industrialization, becomes crucial. Depending on only one income resource (oil) will create destructive damage impacts on the region's economies. Firstly, on the supply side, despite the huge reserves in the region, oil supplies are not everlasting. "At recent rate of utilization, oil in all GCC countries will run out in the lifetime of the present generation (Qatar, Bahrain and Oman), its children (UAE), or its grandchildren (Saudi Arabia and Kuwait)." (Kubursi, 1984:43). Secondly, on the demand side, the discovery of oil in other regions rather than the Gulf, the promotion of other energy sources (solar and nuclear energy) and the technical rationalization of oil usages in industrialization (due to technological advance) have created a negative impacts on the oil prices from 1982 upwards. According to (Free World Energy Review, October 1985), the percentage share of oil in the total world energy is estimated to decrease from 49% in 1984 to 42% in 2000. Depending on this scenario, industrialization in the region becomes the only option for diversification and hence GCC countries are in a race against time to build a sound industrial base. The intimate link between GDP and oil prices is the major characteristic of all GCC countries and "oil revenues still influence both private and government expenditure and determine aggregate demand (migration also dependent highly on oil revenues)" (Anani, 1992:17). To show the link between oil prices and annual labour growth in the region, labour force grew at annual rate of 10.9% between 1976-80, 10.6% between 1981-85 and only 1.7% between 1986-90 due to low GDP growth in that period resulted from oil prices reduction (Ibid). The oil prices increases during 1970s has created huge changes in the GDP of the GCC countries which has presented earlier in Table 8. The percentage change in GDP, according to the table, was varied from 1038% in Saudi Arabia to 45% in Bahrain. In accordance with oil prices collapse during 1980s this scenario

has been changed. For example, in UAE, where GDP growth rate was less adversely affected over time than others except Oman when oil prices collapsed "GDP increased by 11.4% in 1981 following from a peak in oil prices. Oil prices collapsed after 1981 and the growth rate reversed itself immediately, falling to -7.2% in 1982 ...the negative trend continued through 1986 when oil prices dropped to \$ 13.7 per barrel.

A -21.2% in growth rate resulted" (Anani cited in Robert, M. 1994:37). Subroto, the Indonesian Minister of Mines and Energy, argues that "OPEC began trying to act as a cartel setting production ceiling on members from 1982, not to increase prices but rather to defend the level of prices which OPEC thought it was entitled to" (Subroto, 19986 cited in Shihab, 1992:9). The oil prices now (1995) have been estimated between \$ 14 to \$ 17 per barrel (Al-hayat, 29 September 1995:13). In Saudia Arabia, the decline of the oil prices has forced the government in 1994 to announce a 20% reduction in its budget. Industrialization is indispensable as the result of the fact that agricultural option does not exist and restricted by limited availability of agriculture land and lack of water resources. For example, the cultivated land is estimated to be only 5.5% of the total land in UAE and desalinated water is too costly for use in irrigation and the agricultural contribution to GDP in 1981 was estimated to be 0.8% which raised to only 1.7% in 1989 (Robert, 1994:37). In 1981, agricultural participation in GDP ranged from 0.2% in Kuwait to 2.1% in Bahrain (Kubursi, 1984:9-10). From 12% in 1984, the total contribution of the manufacturing sectors in the region was projected to increase to 20% by 1990.

Beside economic diversification in the region, industrialization is recommended to capture the value added from oil-related industries and processing crude oil. Industrialization is also needed to reduce the dependence on imports and to increase the self-sufficiency opportunities. Moreover, through industrialization the acquisition of skills, the promotion of human resources and the sound transfer of technology can be achieved. Industrialization offers unique

opportunities to technology to be adapted and suited to the local environment and to upgrade the indigenous technological capabilities. In response to diversification plans in the region and with the completion of the major infrastructural projects, the structure and the composition of the migrant labour force have been changed where highly skilled and professionals are required to manage industrial sectors and maintenance sectors and training and upgrading the skills of the local labour force.

Most of the GCC countries have invested large part of their huge financial resources outside the region in form of foreign assets. For example "Abu Dabi Investment Authority (ADIA), which manage the bulk of the country's reserve funds, maintain an intentional blackout on its activity....ADIA's investment at \$ 20-25 billion, invested almost exclusively in the USA, Canada, Western Europe, Japan and Australia" (Shihab, 1992:83). This policy has created unacceptable social and psychological impacts on the nationals. In addition to that, this huge foreign investments are subjected to external political risks and uncertainties such as in "the decision of the British Government in October 1988 that Kuwait has to reduce its share holding in British Petroleum is an example of the limitation a country has on its foreign investments" (ibid). To remove this, these countries have adopted diversification development through industrialization by redirecting their investments into the region to consolidate and strengthening the social real participation of the nationals in the development of the region despite the higher profits that investment can be generated outside the region.

#### **4.2. INDUSTRIALIZATION OBJECTIVES:-**

The general philosophy of industrialization in the region is summarized by Saudi Minister of Industry and Electricity as follows "The principle is to make use of the comparative advantages available. The objectives are to add value to human and capital resources, supplement traditional oil exports, introduced new technologies and provide the basic linkages

backwards to the raw material sector and forward to a wide variety of potential industries. The ultimate aim is to create a diversified and profitable economy" (Algozaibi, 1982). Robert E. Looney (1993:25) argues "the arrival of a viable and self-sufficient manufacturing industrial structure has long been viewed as the prime objective of the Arab Gulf States, as the key to successful economic diversification, and as the main assurance of continuing and self sustaining economic growth".

The general objectives of industrialization strategies in the Gulf, according to H.T. Azzam (1988:35), are as follows:-

1. The development of the second generation industrial ventures founded on the basic chemical and metal industries that are now completed.
2. The development of associated support industries which can cater for the maintenance and repair requirements of many basic industrial and infrastructural objectives.
3. Increase import substitution wherever possible with the transfer of technology from abroad.
4. Increasing exports by capitalizing on the region's comparative advantage in certain products (oil and gas related).
5. The development of inter sectoral linkages to exploit the industrial opportunities provided by mineral resources, agriculture and new technology.
6. Working towards a geographically balanced development of the region by enhancing regionally based industries.
7. Industries in the region would address the collective Gulf market and avoid in as much as possible duplication of projects that result in over capacity.

#### **4.3. THE ROLE OF THE INDUSTRIAL SECTOR IN THE GULF ECONOMIES:-**

The oil-related industries (petrochemicals and chemical fertilizers) are the major component of the industry in the region. This oil-related industry is benefiting from cheap energy sources which is the natural gas. This gas is produced as by-product which represents 10% to 12% of the energy



content of the barrel of crude oil with which it is associated in crude oil extraction. Hence the location of these industries close to the oil-extraction areas offer a very cheap source of energy which can be regarded as a comparative advantage. Hence the development of industrialization has allowed the region to reduce the amounts of the waste flared associated gas in the oil production process where "the proportion of waste in 1971 for the GCC region as a whole (Oman and Bahrain excepted) was as high as 90%. By 1980, however, the waste proportion had fallen to 55.9% in the region as a whole" (Kubursi, 1984:44).

By 1985, according to the Gulf Organization for Industrial Consulting, there were 3600 licensed companies in the region with about \$75 billion of investment and the majority of them engaged in import substitution products which highly dependent on migrant labour and imported technology and raw materials.

Table 9 represents the contribution of the manufacturing sectors to GDP in the GCC countries between 1980-1985. The table indicates the limited participation of the manufacturing sector in the GDP of the region. The highest participation is in Bahrain (12%) while that of Qatar, Kuwait and UAE have been relatively stable. The participation of manufacturing sector in Saudi Arabia in GDP increased from 5% in 1980 to 8.3% in 1985 while Oman recorded the highest annual percentage contribution of manufacturing to total GDP (from 0.7% in 1980 to 3.2% in 1985). During early 1970s oil represented about 70% of the total GDP of the whole GCC countries and the non-oil sectors represented 30% with the participation of manufacturing did not exceed 2% of the total GDP. By 1995, the oil participation has decreased to 40% while the non-oil sectors participation has increased to 60% with manufacturing constitutes 8% to 9% of the total GDP of the region (Al-hayat, 27 September 1995:3).

Saudi Arabia dominates the economy of the region where in 1981, as an example, "the Saudi Arabian economy produced 65% of the region's GDP in that year, about 65% of it's crude oil, some 65% of it;s manufacturing output, and so on. The UAE

accounted for about 15% of the total GDP and Kuwait for 12%" (Kubursi, 1984:10). In Qatar, the increase of the share of the non-oil manufacturing in the total GDP can be regarded as a real indicative of the success achieved by Qatar at industrial diversification where "manufacturing sector accounted for 5% of GDP and 11% of non-oil GDP in 1980. There was a fairly steady increase in the manufacturing output in the 1980s so that by 1987 the sector accounted for 9.9% of GDP and 14.3% of non-oil GDP." (Robert E. Looney, 1993:126). By the end of 1985, Qatar was ranked only behind the UAE in terms of relative industrial diversification in the region.

#### **4.4. INDUSTRIALIZATION AND INVESTMENT:-**

Outside the OECD region, GCC countries represent the largest concentration of the investment commercial opportunities and according to the World Bank data this region enjoys one of the highest per capita income in the world with foreign assets that exceed \$200 billion. From the total world's oil production, the Middle East production was about 29.8% in 1994 with Saudia Arabia alone produced 45.1% out of the total region's production followed by Iran, UAE and Kuwait (also Saudia Arabia has 26% of the total world's oil reserve) (Al-hayat, 29 September 1994:13). The huge financial resources which have been generated by oil wealth can be seen in Table 8 which represents the change in the GDP of the GCC countries between 1970 and 1977. The percentage change in GDP, according to the Table, was varied from 1038% in Saudia Arabia to 45% in Bahrain. It has been estimated that GCC countries invested in the first half of the 1970s around \$560 million (4.8% of the total development expenditure) in manufacturing and that rate rose to \$15 billion (14% of their total investments) in the second half of the 1970s. The figure during 1980-1985 rose to \$40 billion which representing 13% of the total investment. This huge investment raised the per capita contribution of industry to GDP from \$190 to \$839 in 1983/1984. For example, in Saudia Arabia, which has the largest industrial base in the region and with 40% of World crude-oil reserves, investments

in refinery projects was estimated until 1986 to be more than \$ 10 billion with other \$ 10 billion has been allocated to petrochemical industries at Jubail and Yanbu industrial areas (Donald, A. 1986:274). By the end of 1983 the total investments in industrial sector in Saudia Arabia was estimated to be \$ 29 billion.

Governments in the region encourage the private sector participation in industry by various incentives such as tax-holidays, low cost land, subsidized utilities, easy credits (during the past 15 years Saudia Arabia extended \$58 billion of low interest loans to industrial sector) and appropriate industrial infrastructure.

The region also attracts foreign investments due to free convertibility of regional currencies, simplicity of the tax systems and the freedom of profit repatriation. The local manufacturing has been well protected from imported products and where there is a local industry the tariffs on imported manufacturing goods are 4% to 20% and simultaneously there are no tariffs on imported raw materials. The local manufacturing is protected by a common tariff which applied by all countries. Moreover, the locally produced goods are favoured in governments contracts and "all foreign companies winning government contracts to subcontract 30% of it to a wholly owned domestic contractors and suppliers.....(because) what the region after is not simply the establishment of production units but the transfer, adaptation and acquisition of know-how and technology." (Azzam, 1988:39).

#### **4.5. INDUSTRIALIZATION AND JOINT VENTURES:-**

The joint ventures are regarded as a major tool for industrialization in the region where overseas partners are attracted by various generous government incentives. Despite the small variation in the incentive packages, their general targets is to establish sound industrialization through transferring of technologies, experiences and skills and improving the skill structure of the national labour force. However, the incentive packages of the Saudi Arabia, according

to Azzam (1988), can be regarded as representative in this respect and it include the following:-

1. Ten-year tax holiday and there are no personal taxes on expatriate staff.
2. Free repatriation of profits and foreign currencies transactions.
3. Provision of 50% of the invested capital by Saudi Industrial Development Fund at very low rates.
4. Fully-serviced sites are provided for an annual rental of just 20 centimes a squire metre.
5. Raw materials are exempted from custom duties.
6. Financial grants and free training facilities are provided to train Saudi staff.
7. Preferences are granted to locally-manufactured products for government contracts.

In the majority of the joint venture system foreign companies are ordered to subject 30% of the total contracts to national subcontractor beside the usage of the local products (raw materials and services). In addition, maintenance and operation jobs have been gradually transferred to local companies. One of the major benefits of this partnership to promote and develop industrialization in the region is their marketing experiences and capacities to market the region's products internationally especially in petrochemicals. Therefore "Joint-venture partners, of course, are expected to market much of the oil products and petrochemical output of the projects now under construction in the GCC states.....(in Saudi Arabia) agreements require that not less than 65% of output in petrochemical projects be marketed by their joint-venture partners" (McHale, 1982:107) and "when Taiwanese government, (for example), issued a decree banning imports of urea , it exempted the Al-Jubail Fertilizer Company (SAMAD), in which The Taiwan Fertilizer Company is the joint venture partner" (Looney and David, 1992:586).

The solid governments supports and the attractive industrial atmosphere have induced various foreign companies to establish partnership with national industrialists. The economic

situation which prevailed in early 1970s, in which GCC region was a market of overseas goods and services, was changed. Instead, the joint ventures between foreign supplier of those goods and services and local partners have been increased and the example is "between Basmah and Nestle for the production of dairy products. Once the established brands start being manufactured locally it will immediately enjoy a secure market. The manufacture of these products locally would also create demand for a whole range of other related products and materials" (Azzam,1988:131).

A clear example of the importance of the joint venture system to industrial development can be derived from Table 10. This Table, which represents the foreign participation in joint venture in Saudia Arabia by nationality and industrial sector in 1985, indicates the variety of technology and experiences from the whole globe that industrial sectors in the region can benefit from.

GCC countries have signed various economic and technology transfer agreements with different countries such as that between Saudia Arabia and South Korea (1975) and according to which Korea gained between 1978 and 1979 about 23.3% of the total Saudi construction market (H.M. Ling 1984). The East Asian multinationals participate highly in industrial development of the region which has been illustrated in Table 11. This Table represents the distribution of the South Korean firms in the Middle East and the costs of the contracts during the period of 1971-1981. This Table shows the domination of Hyundi and Samsung industrial firms. Financial institutions in the region have also played crucial role in establishing Korean joint ventures where "in 1976, the Korea Development Bank raised \$24 million through a bond issued in Kuwait. The first joint Arab-South Korea Bank, the Kuwait Korea Bank corporation, has opened in Seoul. In 1980, Seoul received a branch office from Saudi Arabia's largest bank, National Commercial Bank."(Ling, 1984:32).

#### **4.6. MAJOR INDUSTRIES:-**

##### **4.6.1. PETROCHEMICALS:-**

The petrochemical industry in the region, according to Kubursi (1984:52), "has a natural linkage to the resource base of the region; raw material costs exceed 75% of total production costs in the case of most of the products and represent a large share of total costs generally for the industry as a whole.". In all GCC countries down stream petrochemical industries are given the major role in industrialization development plans due to the comparative advantages of raw materials and cheap energy (flared gas) and "based on abundant financial capital..... access to "buyable" technology, "buyable" skill..... down stream processing, particularly oil refining and petrochemical, became the first and most logical objective of development planning in the area that now comprises the GCC" (McHale, 1982:99). For example, SABIC plant of Saudia Arabia invested more than \$ 43 billion during 1985-90 development plan in plastic, fertilizers and other petrochemical industries. The ethylene, methanol and ammonia products dominate the petrochemical industries in the region. The production of final petrochemical products include polyester fibres, thermo plastic, rubber products, tires, insulation paint plastics, nylon, animal feeds and fertilizers and others. By early 1987, the region produced more than 6% of the world's petrochemicals and despite the application of tariff barriers by several European countries on the petrochemicals of the region (e.g. in 1985, the EEC imposed 13.4% custom duties on polyethylene from Saudia Arabia), GCC countries are intended to enter the world market in an orderly and controlled manner (especially the third world markets) (H. Azzam, 1988:144).

By the mid-1980s, according to Kubursi (1984:50-51), the combined capacity of petrochemical production in the whole GCC countries as a percentage of the world's production included the following: 5.7%, 9.5%, 7%, 12.1%, 5.4%, 5.1%, 4.9%, and 6.8% of the total world's production of ethylene, methanol, ethanol, ethylene glycol, styrene, LDPE, HDPE and amonia



respectively.

In Saudi Arabia, there are three major ethylene crackers with a total capacity of 1.6 million tons a year. These companies are Petrochemy, which is fully owned by SABIC and supplies ethylene to the Eastern Petrochemical Company (Sharq) a joint venture between SABIC and a Japanese consortium led by Mitsubishi, Sadaf company which joint venture with Mobil and located in Yenbu and Saudi Petrochemical Company which is a joint venture with shell and located at Jubail. The target of Saudia Arabia, according to Looney and David (1992:583), in petrochemical industry "is to attain only 5% of the global basic petrochemical market".

In Kuwait, Kuwait Petroleum Products Company has built a 20,000 ton phthalic anhydride plant with technology assistance of Lurgi (Germany) and 20,000 tons of expandable polystyrene and 12,000 tons of high impact polystyrene. All these plants are located in Shuaiba industrial area.

In Qatar, the joint ventures between Qatar General Petroleum Corporation and Ddf Chimie of France have ethylene and polyethylene plants.

Bahrain's petrochemicals concentrate on ammonia and methanol production in Sitra industrial plant which owned by Bahrain, Kuwait and Saudia Arabia.

In UAE, various European companies, e.g. ICI and France's Cdf Chimie, have invested in petrochemicals projects in Sharjah in ammonia and urea production.

#### **4.6.2. CEMENT:-**

Cement industry is stimulated by the huge infrastructure development programmes since early 1970s. The demand of cement is expressed by (Fagan, 1983:5) "Less than 10 years ago demand for imported cement in the Gulf was so extreme that, in the face of appalling port congestion, fleets of helicopters were used to shuttle back and forth between ship and shore carrying loads of urgently needed cement". There are 29 cement factories in the region which produced 23.6 million tons and 30 million tons in 1985 and 1988 respectively and while 35% of



the cement used in the region was imported in 1981, in 1988 only 8% of the total was imported. This indicates the ability of the cement industry to cover the needs of the region and the projection for the international markets. To strengthening this industry, GCC countries coordinate and rationalize their cement production. Beside that, those countries have adopted some effective measures to protect their national industry such as the obligation on governmental contracts to buy from national industry.

#### **4.6.3. IRON AND STEEL:-**

This industry, like cement industry, is also stimulated by remarkable economic growth especially in the construction sector. The production increased to 15 million tons in 1990 compared to 11 million tons in 1985 and one million ton in 1970. According to the Gulf Organization for Industrial Consulting, these far behind the region's requirements which are expected to continue. Petromine and SABIC plants in Saudia Arabia were the first in the region and the largest steel complex is located in the industrial area of Jubail with more than 800,000 tons a year capacity. There are other various plants in the region. For example, Qatar "was the one of the first Arab countries to capitalize on the potential offered by new iron and steel industries, making the decision to build a direct reduction-based steel works as early as 1974s" (R. E. Looney, 1993:134). The steel production OF (QASCO) plant is of highest quality and between 1980-85 an average of 90% of its annual output of steel bas was exported to other GCC countries motivated by about 20% tariff on imports from non-GCC countries. Due to presence of capital, new technology, cheap energy, raw materials and highest combined forward and backward linkages of iron and steel industries, it has been argued that this industry, like petrochemicals, has a good comparative advantage in the region and a promising future.

#### **4.6.4. ALUMINUM:-**

Aluminum (Alab) plant in Bahrain and Dubai Aluminum (Dubal) plant in UAE are the most important aluminum producers in the Arab region. The comparative advantages of this industry are cheap energy (natural gas) and huge capital. Most of the production of Alba plant was exported to Arab countries in the 1980s (R. E. Looney, 1993:104-107). These two major plants have given rise to several down stream aluminum based industries in Bahrain and UAE (e.g. building requirements and exterior doors and windows). One of the important downstream industries in Bahrain is the (Garmco) plant which constructed by Japan's Kobe Steel Company and jointly owned by all GCC countries. The actual production of (Dubal) plant was jumped beyond the capacity (135,000 tons a year) to 150,000 tons and the total capacity of Alba plant is 120,000 tons a year (Kubursi, 1984:109). Due to the efficiency of aluminum industry and to protect its promising future success, GCC has imposed a 20% duty on the imported aluminum products in the region (Dubal Annual Review 1985).

#### **4.6.5. FERTILIZERS:-**

Due to the availability of abundance of natural gas which is regarded as an important inputs of fertilizers production, this industry has also comparative advantage in the region. In addition to petrochemicals, this industry is given priority in industrialization policies to increase the gains from nitrogenous fertilizers international market. Kuwait has started this industry earlier and until 1988 it had the largest nitrogenous complex in the region with three ammonia plants (2000 tons per day) and three urea plants (2500 tons per day). In Saudi Arabia, (Samad) company in Jubail, which joint venture between SABIC and Taiwan Fertilizer Company has started its production in 1983 (500,000 tons per year). Safco Company, beside others, also produce urea and with more than 106% of the design capacity was produced in 1984 (H. Azzam, 1988:153).

In Qatar, (QAFCO) plant (R. E. Lonney, 1993:130) produced the

majority of the urea and ammonia production in 1984 with net profit of 170 million Qatari Riyals. The (FERTL) plant in UAE, which joint venture between Abu Dhabi National Oil Company and Compagnie Francaise, is the major fertilizer (Shihab, 1992:56) project in UAE with a capacity of 272,000 tons of ammonia and 228,000 tons of urea and both have been marketed by Mitsubishi. In Bahrain, export oriented plant of ammonia and methanol has been established in 1985 between Bahrain National Company, Kuwait Petrochemical Industries and SABIC.

#### **4.6.6. LIGHT INDUSTRIES:-**

The structure of the light industries has been changed from construction sector-related industries, which dominated in the 1970s, towards import substitution industries such as consumer goods, chemicals and plastic, pharmaceutical products, vehicles and engineering equipments. Generous investment policies and incentive packages have stimulated the establishment of various industrial conglomerates which are integrated vertically and horizontally such as Alghanim in Kuwait and Zamil (where most of the production staff are Filipinos (Donald, 1986:281) and Jaffali in Saudia Arabia. According to Azzam (1988:155), "Bahrain, for example issued more than 200 industrial licenses over the 1981-85 period..... Nearly 80 small scale industries have been licensed in Qatar since the beginning to 1981. In the UAE there was a total of 800 small to medium size manufacturing companies..... The Saudi Industrial Development Fund had up until 1985 provided finance for more than 1000 projects at a total cost of over \$10 billion..... The GCC countries would be spending around \$100 billion during the period 1985-90 for operation and maintenance the establishments built over the last decade". Oman, for example, "has developed fruit packing plants in Batinah and Salalah.... In addition, there are new date storage facilities in Muscat. The country has also dairy facilities capable of producing 0.72 million litres of yoghurt and 1.5 million litres of milk products" (Kubursi, 1984:114).

The joint venture system has been regarded as a major driving force for the development of light and intermediate industries in the region where foreign companies are obliged to buy local raw materials and subject a minimum of 30% of their contract to local subcontractors. The oil-related petrochemical and fertilizers have a trickle down effects that new light industries are established such as plastics, paints and rubber industries. To decrease the dependence on food importation, more attention is given to food industries (Bahrain, Kuwait and Saudia Arabia) such as grain, milk products, vegetable oil, soft drinks and other industries.

#### **4.7. PROBLEMS OF INDUSTRIALIZATION :-**

The process of industrialization in the region, according to (Abdulla,H. 1986:11-12), has dependent on external rather than internal dynamics where industrial plants, which have been built through turn-key contracts with foreign firms, belong to regional in a geographical sense and dependent highly on external factors. In addition to that, industrialization is handicapped by the absence of comprehensive strategy of development on the regional level where the role of manufacturing in the socio-economic development of the whole region has not been clearly defined and "the actual growth of industry in each state has not been related to a regional strategy aimed at maximum exploitation of regional resources and markets" (Ibid p.12).

Robert E. Looney (1993:69) refers to the domestic constraints which negatively affect the promotion of industrialization in the region and these constraints "are represented by the lack of any clear link between investment and production policy on the one hand, and export and strategy on the other ..... with the exception of the petrochemicals industry, there has been a lack of sound assessment of export potential". Shihab (1992: 102-104), states that "many industries were set up without a feasibility study which resulted in projects whose capacity did not match the local market, and with technologies not suited to the local enviroment ..... some foreign partners in

joint venture projects use the projects use the project as a guinea-pig to try out unproven technologies ..... (or) use materials in production which are not permitted in similar processes in the home countries of these companies (e.g. blue asbestos)".

On contrast to most developing countries, which have abundant labour force, GCC countries have witnessed extreme shortages in national labour force that needed in industry despite their financial and foreign exchange resources. This leads to total dependency on migrant labour which dominate industrial sector while the nationals prefer trade, services and white collar government jobs. The average percentage of the migrant labour in the total labour force (ESCWA 1992) in the total GCC economies during the previous two decades were estimated as follows; 46,5% in 1975, 65,2% in 1980, 70,2% in 1985 and 67,7% in 1990 (and for countries figures see Chapter Three 3.7). For example, in Saudia Arabia the national labour force between 1980-90 was estimated to be between 1.8 and 2 million (Donald, 1986:279-281) with the total industrial labour force represented only 7% of the total Saudi employment. An illustrative example is "the Saudi transformers Company, associated with Belgium Company Pauwels International, only the general manager is Saudi. The plant manger, the quality control engineer and the head of maintenance and engineering are all Belgium. The production engineer is from the United Kingdom. The 120 technical staff are Filipinos" (Middle East Economic Digest, November 1983 in Ibid).

The similarities of resources bases in the region which highly related to the oil have led to the establishments of similar industries which by turn can reduce the scope of the regional trade and specialization. This industrial duplication (e.g. dry docks (3.5.1.) and aluminum industries) may increase ruin competition in the internal or export market. This completion feeling, in which industrial, commercial,(social and education infrastructures) duplications have occurred, has been originated from the tribal mentality where "In the heated competitive climate of tribal nationalism in the lower Gulf

area, the economic logic may not prevail over the emotional considerations encouraged by an abundance of investment" (Mertz quoted in Sheikha, 1985:244). Moreover, the unit cost of production in various industries (iron, petrochemical and fertilizers) is high because most of these industries have operated below their design capacity. In addition to that, the high prices of importing technologies, raw materials and migrant labour have also increased the production costs. Due to lower levels of industrial and technological bases in the region and higher dependency on migrant labour, know-how and equipments, the cost of establishing petro- and petrochemical plants increases by 50% to 100% compared with costs in U.S.A. and Europe. For example "an aluminum smelter in the UAE and Gulf countries costs to build \$ 6000 per metric ton of production capacity while it costs only \$ 3500/m.ton capacity in the USA or Europe" (Badawi cited in Shihab, 1992:103) The small size of the domestic market and the low forward and backward linkages of industries are also regarded as obstacles for industrial development. There are other obstacles such as ineffectiveness of the existing marketing system, the low prices of competitive imports and the inability of the region's industrial products to compete internationally (e.g. the Gulf's petrochemical products are arriving on the market when demand has started to decrease). In order to protect their own industries, industrial countries (EEC, USA and Japan) have adopted various barriers (quantitative restrictions such as quotas, import duties and anti-dumping duties and non-tariff barriers) to industrial fertilizer and petrochemical imports from the GCC countries. In 1986 the EEC had imposed protective duties on seven of Saudi Arabia's petrochemical exports, on methanol exports from Bahrain and on urea exports from Kuwait and the tariffs range between 8% and 14.5% (R. E. Looney, 1993:52). Industrial countries between 1975-1981, According to Kubursi (1984:15), provided between two-thirds and three-quarters of goods imported into the GCC countries. Having the fact that exportation becomes a crucial necessity for small-market sized GCC countries to maintain and

expand their industrialization capacity and to avoid dependency on one market, these countries have to firstly increase their integration especially in economic aspect, secondly, to increase their trade links with neighbouring Arab countries (separation of trade relations from political relations between Arab states is important). Thirdly, GCC countries have to develop their economic relations with other developing countries with large markets such as India, Turkey and China through the joint venture system. For import substitution industries, Beside the small sized local market "as the result of the new affluence, local tastes have become so sophisticated that only the advanced industrial countries of the west can provide the consumer goods in popular demand, which require complex technology and considerable expertise" (Rodeny Wilson, p.76).



**CHAPTER FIVE**  
**INDUSTRIALIZATION IN UAE**

The previous chapter has discussed the structure of industrial sector in a regional level. However, for close examination, this chapter is aimed at analyzing the structure and the role of the industrial sector in the economy on a country level. The case study of UAE will be presented because industrial diversification in UAE is regarded as the most successful in the gulf region (R. E. Looney, 1992:11).

Industrialization in UAE, as in all GCC countries, is regarded as a major tool of economic diversification, technology transfer and a source of new incomes. Industrial production, according to Looney (1993:158), is concentrated in different emirates of UAE, in roughly the same proportions of contributions of each emirate to the total GDP, as follows: Abu Dhabi 61.3%, Dubai 25%, Sharga 8.2%, Ras al-Khaimah 3%, Fujairah 1.1%, Ajman 0.9% and Umm al-Quwain 0.5%.

**5.1. INDUSTRIALIZATION GOALS AND OBJECTIVES:-**

The government of UAE has directly involved in industrialization through securing the required investments and encouraging the private sector participation and supplementing its activities by investing in large projects and industry-related infrastructure and according to (World Bank, 1983:22) "The emirates have sole responsibility for industrial development within their respective geographical limits and they also have sole control of the financial surplus of their oil wealth which finance most industrial as well as other venture".

The general objectives of industrialization, according to (Fatima, S. 1992), are as follows:-

1. Increasing the contribution of the industrial sector to GDP and decrease the total dependence on the oil sector.
2. Encourage the expansion of industrial activities which generate new income sources and foreign exchange.
3. Exploiting the comparative advantages of the country (cheap

energy and feedstock) which allow the establishment of sound hydrocarbon-based industries.

4. Creation of strong forwards and backwards production linkages with other sectors of the economy.

5. Enhancing government participation in large-scale, capital-intensive projects and encouraging the establishment of productive joint venture activity.

6. Attract foreign investment in activities that require advanced technology and are highly competitive in international market.

7. Encouraging the participation of the national labour force in industrialization where national labour and management must be not less than 25% of the total in each project.

#### **5.2. LABOUR MARKET:-**

The share of the nationals in the total population decreased from 63.5% in 1968 to 27.9% in 1980 due to huge migration and the ratio of expatriates to nationals varies from one emirate to another. This domination of migrants is attributed to the lower population size (1,042,099 in 1980) and the young structure of the population where 38% of them in 1980 below 10 years. In addition to that, the high enrolment of the nationals in education also affects that where in UAE, as other GCC countries, education has become available to all nationals and graduates have been guaranteed jobs in the civil services.

Asian migrant labour in 1980 was 48.2% (more than local nationals) while Arabs were 21% of the total migrants and Americans and Europeans were 2.6%. As the result of that migrant labour represents 90% of the total labour force which is the more important characteristic feature of the UAE labour market. Due to that crude participation increased from 43.4% in 1970 to 52.7% in 1975 and further to 53.7% in 1980. Female participation remains small (2.1% in 1968 and 8.8% in 1980) (Shibab 1992). The participation of the nationals in the labour force has been decreased in the previous two decades, despite their continuous increase in absolute numbers, from 15.2% in 1975 to 9.8% in 1980.

### **5.2.1. INDUSTRIAL WORK FORCE:-**

Depending on the three industrial surveys of 1978, 1981 and 1985 Table 12 shows the number of industrial establishments and the number of workers engaged by each industry and establishments employing less than 10 persons are not included in the table. Most of industrial establishments are located in Abu Dhabi, the largest and richest emirate, and Dubai. Generally, with exception of Wood and Furniture, the surveys show continuous increase in industrial establishments between 1978 and 1985 and for industrial employment there was continuous increase during the period from a total of 19213 in 1978 to 30813 in 1981 to 39044 in 1985 and the majority of this industrial labour force was consisted of migrants. Shihab (1992:48) confirms that "out of 30,813 persons engaged in manufacturing in 1981 there only 485 nationals (1.57%) 7 being female. Among the 485 nationals 107 were proprietors of the whole or part of the business, 11 were working for their family business without wages. Thus the nationals who were working for wages were only 367 only". Other study shows the nationals represented in 1981 only 1.3% of the total industrial sector work force with only 6.7% of management job, 1.8% of the professionals, 2.6% of the clerical jobs and 0.8% of the skilled and unskilled jobs. The survey of 1985 showed small change in national industrial participation where 18% of them in management jobs, 4.9% were technicians, 0.4% were skilled labour and 43.4% were unskilled labour. Undoubtedly, these figures confirm the total dependency of the industrial sector of UAE on the migrant labour that dominate approximately 98% of the industrial jobs.

### **5.3. THE ROLE OF THE INDUSTRIAL SECTOR IN THE ECONOMY:-**

The federal government of UAE and the governments of emirates (especially Abu Dahbi and Dubai) have invested, through the public sector, extensively in industrialization especially in manufacturing which requires huge investment such as refineries, fertilizers plants, petrochemicals, aluminum smelters and cement industries. The value of investments in the manufacturing sector have been increased since 1970s from Dh. 3.3 billion in 1978 to

Dh. 25.5 billion in 1985. According to industrial surveys of UAE of 1978, 1981 and 1985, the gross output of industrial sector increased from Dh. 2,388 million in 1978 to about Dh. 5,566 million in 1981 and further to Dh. 6,423 million in 1985.

The contribution of the oil and gas to GDP fell from 66.5% in 1975 to 37.0% in 1987 while the contribution of the manufacturing increased ten times from 0.9% in 1975 to 9.4% in 1987. According to (Fatima Al-shamsi, 1992:9) "The manufacturing sector's share of total capital formation reached its peak in 1982, 40.4% compared with 19.5% in 1975.....Most government investments have been channelled to large scale oil-based industries 36% and to construction related materials steel, aluminum, cement,....

etc (42% of the total) .....MVA at 1980 prises grew at annual rate of 54.8% during 1975-80". During the period 1975-85 "the UAE had the biggest gain in industrial diversification, followed by Qatar and Oman. The other GCC countries experienced declines in their share of manufacturing in non-oil GDP"(R. E. Looney, 1993:11). The industrial production, according to (Ibid p.157), "had increased 27 times between 1975 and 1985, with an annual growth rate of 13.6%. Industry contributed 1% of the GDP in 1975, and in 1984 accounted for 9.7%". This confirms with industrialization objectives in which industrialization "is a main aim of the state for the correction of the structure of production in which the crude oil sector accounts for about two thirds of the GDP.....The industrial sector, according to economic criteria, is the sector on which economic efforts should be concentrated" (Mop, in Shihab, 1992:83).

Table 12 represents the distribution of the industries by type between 1978 and 1985 which employ more than 10 persons. The non-petroleum non-metallic industries represent the second large industries and within this group there are 9 cement factories with a gross out put of Dh. 695 million and a total employment of 2,326. The distribution of the manufacturing establishments in UAE is as follows: Dubai with 215 establishments represents the emirate with the largest number of industrial establishments; Abu Dhabi with 154 establishments; Sharga with 151 establishments and Ras Al-khaimah with 21 establishments. The concentration of

industrial establishments in Dubai and Abu Dhabi is attributed to their efficient infrastructure (e.g. see ports and airports), wealth and availability of cheap energy source.

Table 13 represents the GDP real growth by economic sector during the period of 1975-86. It shows the continuing importance of the non-oil sector in the total GDP while the contribution of the oil sector was decreasing. It is also noticed from the table the increasing rates of the manufacturing sector participation in the GDP during that period. The reason behind that is attributed to the deterioration of the oil prices which has led the government to give diversification policies a crucial significance in the whole economy. Robert, M. (1994:37) also shows this trend in UAE's economy and while in 1981 mining (oil) and manufacturing contributed to the economy by 64.4% and 3.3% respectively, in 1989 their contribution were 39% for mining and 8.6% for manufacturing. This economic restructuring has been followed directly by adopting high capital intensiveness in manufacturing where the demand for skilled labour increases. the future demand for labour in non-oil sectors will "outweigh that in the oil sector it self, particularly agriculture, manufacturing, maintenance and manual services" (Choudhury quoted in Ibid). Table 14 represents an overview of the manufacturing sector based on output, capital investment and employment data during the period of 1975-1985. It is clear from this table that this sector has witnessed a rapid growth due to the government's goals of economic diversification. The expansion of industry during 1980-85 was noticed from the table to be lower than over 1975-80 period and this was attributed to, among other factors, the decrease in oil revenues which affected industrial investment.

#### **5.4. MAJOR INDUSTRIES:-**

UAE, as other GCC countries, due to the comparative advantages and the availability of cheap energy, capital, imported technology and skilled migrant labour gives more attention to oil-related industries in its industrialization strategies. There are two major components of industries in UAE firstly are the capital intensive export-oriented industries which concern with

oil-related industries (petrochemical, fertilizers, iron and steel and aluminum smelters) and the second type are import substitution small-scale industries (cement and food processing).

#### **5.4.1. OIL-RELATED INDUSTRIES:-**

There are two oil refineries with a total capacity of 200,000 b/d which is less than one fifth of the oil production in the country. Both of the refineries, Umm Al-nar and Ruwais, are situated in Abu Dhabi. The local refining generates more income than exporting the crude oil and according to McHale (1982) it is regarded as a first step for industrializing the country.

To benefit from the gas that produced during oil's extraction, which usually wasted by flaring, UAE established various gas liquefaction industrial projects such as (ADAGAS) company which is venture company between Abu Dhabi and foreign oil companies, (GASCO) company in 1981 with total production of 2.5 million tons of propane, butane and pentane plus, (DUGAS) company of Dubai which provides Jebel Ali industrial area and Dubai Aluminum Smelter (DUBAL) and the (SHALCO) company of Sharga emirate which started in 1986 (Socio-Economic Development in UAE During 1985-90, 1993). Gas is used as cheap source of energy in industrialization (aluminum smelting) and as a raw material in petrochemical industries. In addition to that, it is used in the electricity generation and desalination of water. According to (Sakr 1986) and (Shihab 1992), more than 92% of the gas in Abu Dhabi in 1983 was exploited in contrast to 93% which had to be burned in early 1970s. Beside that, gas represented 8.8% of the total exports of UAE in 1983 with a growth rate of sales from Dh. 2430 million in 1980 to Dh. 5275 million in 1984.

FERTIL project, which is a joint venture between Abu Dhabi National Oil Company (ADNOC) and Compagne Francaise des Pelrotes, is the main petrochemical project in UAE. This project, with a total capacity of 2500 tons per day, is located in the Ruwais industrial zone and the majority of production (Ammonia and urea) is exported overseas to India, China and Japan. The National Chlorine Industries (NIC) produce salt, chlorine, hydrochloric acid, caustic soda and distilled water with annual capacity of



52,700 tons.

In general it has been estimated that in 1984 all oil-related industries represented for over Dh. 3.5 billion of the total exports of UAE which was Dh. 58 billion.

#### **5.4.2. ALUMINIUM SMELTING INDUSTRY:-**

The aluminium smelter plant of Dubai (DUBAL) is regarded, beside (ALBA) of Bahrain, as one of the major aluminium smelting projects in the Arab region. The cheap gas energy of (DUGAS) plant is linked with DUBAL plant and the tapping of the hot exhaust gas is used for the desalination plant which supply Dubai with 60% of the required drinking water. As the result of that "DUBAL is one of the most energy efficient smelters in the world because of this link. Instead of working at an average of about 27% thermal efficiency the overall efficiency is on average about 55% because of the benefit that desalination plant makes of the exhaust heat." (Shihab, 1992:57). Despite its total capacity of 135,000 tons per year, DUBAL plant produces more than that capacity and the production in 1986 reached 155,065 tons without additional costs. The majority of the aluminium products of the plant have been exported to overseas countries (Japan, Korea, China and USA) while about 5% of the production is consumed locally. DUBAL project is regarded as a successful experience in reaching the objectives of industrialization in UAE in transfer of technology, generation of new income sources, upgrading national skills capacities and diversifying the economies in general. In accordance with GCC objectives of regional industrial cooperation, DUBAL has been always coordinated with other major aluminium plant of ALBA in Bahrain in fields of raw materials purchasing and technical aspects.

#### **5.4.3. CEMENT INDUSTRY:-**

This industry was stimulated by the construction boom in early 1970s and due to that this industry has started in UAE. Ras Al-Khimah plant, with 550,000 tons capacity, was the first to start in 1975 and this plant was until 1985 followed by 8 cement factories which have been established in various emirates. In



1986, the annual capacity of these factories was about 8 million ton per year and the actual production capacity was 4.8 million ton. The internal market of UAE in 1986 absorbed about 2.6 million tons and 2.2 million tons were exported. UAE cement industry benefits much of the GCC agreements which adopt tariff protection of at least 4% against cement importation from outside GCC region. UAE in 1984 covered about 40% of the Oman's cement requirements and also export cement to other GCC countries (Saudia Arabia) (Socio-Economic Development in UAE During 1985-90, 1993). The local cement products are of high quality, according to highest international standards, compared to imported cement because it is more suitable for the salty soil of the region. Cement industry leads to establishing of various downstream building materials industries such as asbestos-cement pipes and sheets industry (two factories and part of their production are exported to GCC countries), tiles industry (41 factories in 1986 and also sizable part of tiles are exported) and cement building blocks.

Despite the huge growth and development of the cement industry in the country, the completion of infrastructure phase and the drop in the oil prices have affected this industry where the production, prices and gross output have been declined since 1981. Moreover the new cement factory in Umm Al-quwain was kept closed following the trial runs in 1987.

#### **5.4.4. FOOD PROCESSING AND BEVERAGES INDUSTRIES:-**

According to the 1985 survey, the numbers of these industries were 80 establishments in 1985 with about one billion dirhames of gross output value which is 500% larger than 1978 figures. This industry is stimulated by the change of dietary habits of the nationals and the presence of huge migrant labour in the country which encourage various international processed food companies to establish joint ventures and partnerships with local companies. This, among others, include various activities such as dairy products/preserving fruits and vegetables; manufacture of bakery products; slaughtering and fish processing and manufacture of cocoa, chocolate, soft drinks and carbonated

water. The soft drinks industry is one of the successful industries due to the hot climate of the country which leads to increase the consumption rates. The UAE since 1983 has become a major exporter of beverages in GCC countries and in 1984 it has been estimated that about 30% of the total production with a value of Dh. 76 million was exported.

#### **5.5. INDUSTRIAL ZONES:-**

Despite industrial zones concentrated in Abu Dhabi and Dubai, there are also industrial areas in all other emirates. All emirates tend to provide industrial land in these zones at reasonable rents beside the advantages of other industrial-related infrastructures. Moreover, the concentration of industries in these zones allow them to benefit from economies of scale, maintenance, cheap energy and services and transfer of technology and skills. The isolation of migrant labour from nationals, to decrease the socio-cultural and physiological impacts of migration, is regarded as essential reason for the establishment of these zones.

The industrial zones of Abu Dhabi are owned by the municipality and Abu Dhabi National Oil Company (ADNOC). They include Ruwais industrial zone with refinery, gas liquefaction and fertilizers plants; Musafa industrial zone with fertilizer plant and various fabrication and mechanical shops; Al-Ain industrial zone with cement and block factory and the Tarif and Sadiat industrial zones.

#### **5.5.1. JEBEL ALI FREE ZONE:-**

It is regarded as an important industrial area in all UAE. It was established in Dubai emirate in 1985 and it includes various large industrial establishments such as the aluminium smelter of (DUBAL), gas liquefaction plant, electric cable factory and Dubai National Gas Company (DUGAS). Approximately 40% of the total companies in the free zone area, which were 332 in 1991, are concerning with manufacturing activities and the total investment in the area was more than Dh. 2 billion in 1989.

The partnership and the joint venture systems are the major

driving force for industrialization in Jebel Ali and "of the total investment in the free zone UAE companies account for about Dh. 1 billion, US companies for about Dh. 700 million, UK companies for about Dh. 130 million and the rest by investors of various other nationalities..... There are corporate tax holidays for 15 years... ..industrial projects are able to benefit from the subsidized electricity.....(in addition to that) foreign companies have decided to benefit from the advantages offered such as the quota allowed to Dubai to export locally manufactured clothing to Europe and USA" (Shihab, 1992:76-88). According to Looney (1993:159), "Foreign investment in 1987 totalling around \$ 500 million , with 180 international and local companies about 25 of these were manufacturers of garments for the U.S. market and Europe ..... clothing exports were estimated at \$ 10 million in 1987". The industrial investments are attracted to the region by the availability of well-established communication and infrastructure, efficient cargo handling facilities and by the large sea port (amalgation of Jebel Ali and Rashid ports).

Jebel Ali free zone is dependent totally on the migrant labour as has been discussed earlier in chapter three. The number of the migrants (see table 7) increased from 43,500 in 1981 (compared with total population of Dubai of 67,600) increased to 93,600 in 1985 and this has led to total isolation of Jebel Ali from labour market of the whole Dubai emirate.

In addition to Jebel Ali there are other industrial zones located in dubai such as Al-Ramoul (with 200 various industrial establishments) and Port Said area.

**CHAPTER SIX**  
**CREATION AND DEVELOPMENT OF A NATIONAL LABOUR FORCE:**  
**THE CHALLENGE OF DEVELOPMENT IN THE GULF**

In this chapter, I will critically investigate and discuss the obstacles that have faced the GCC countries in creating a sound national labour force because human resources are regarded as the critical factor of the region's future development prospects.

**6.1. INTRODUCTION:-**

There are several factors which contribute to the higher dependency of the GCC economies, as have been discussed in Chapter three (3.3), on migrant labour. These factors are summed as follows:-

1. The young structure of the population where more than 45% of the populations were under 15 years of age in 1975 (Hamady 1978). In addition to that, populations of the region are small and in 1983 it was 10.08 million for Saudia Arabia, 1.67 million for Kuwait, 0.89 million for Oman, 0.83 million for UAE, 0.40 million for Bahrain and 0.27 million for Qatar. Robert Looney (1993:37), also argues that in addition to manpower shortages, GCC countries suffer from manpower under utilization, underemployment and structural imbalances in the labour force. Beside low rate of female participation in the labour force and the very low national participation rates, under-utilization is evidenced by the high percentage of children between 0-14 years which over 40% of the total population. For example in Bahrain "Despite the government efforts to build new industries and have Bahrainis replace expatriate labour, the creation of new jobs is not keeping up with the flow of school leavers. There is an expanding pool of unemployed." (Ibid p.115). In Kuwait the major problem facing planners is the increasing signs of an unemployment problem among Kuwaiti graduates (Victor, M. 1989:14).
2. The high rate of illiteracy rates which ranged in 1978 from 31% in UAE to 57% in Saudia Arabia beside the inability of the

education system provide adequate technical skills.

3. The low participation of women in the labour force.

4. Rapid economic growth and ambitious development programmes during the two previous decades.

5. The social attitudes towards work where nationals are not participate in manual and technical jobs.

6. The political instability in the region that stimulates the building of modern armies and security forces.

#### **6.2.THE ROLE OF HRD IN DEVELOPMENT:-**

It seems obvious that higher investment in human resources will lead to higher quality of work force, and by turn enhances the development process of a nation. Schultz (1981) argues that the improvement of population quality through education and health will be the key for economic progress. Hence the expansion of investment into skills, knowledge and entrepreneurial ability can serve as a means to overcome the gulf between the rich and poor nations. Psacharopoulos (1984) argues that economic benefits of education derived largely from skill formation. there have been plenty of data to show that countries with better educated population have higher economic growth rates and at the micro level, evidences confirmed that individuals with more education tend to have higher income, better health, more mobility and increased job opportunities

Human resource development plays a much crucial role in building technological capability. For industrialization, technology acquisition has been regarded as the key factor for creating sound industrialization because according to Muntarhorn (1993:102). there are two inter-related aspects of technology "(technology) is not merely hardware in the form of machinery and tangible materials. It also incorporates "knowledge", embodied in the term "software". Hence the close linkage with education and socialization".

The efficient usage of human resources require balancing the demand and the supply of skilled labour to promote economic growth. Manpower planning, according to Amjad (1987:3), "is a

primarily concerned with determining the skilled composition of this demand and the corresponding investment to meet this demand".

In Asia, for example, it has been generally agreed that the rapid economic growth is attributed to higher degree of human resource investment (Amjad, 1987). Oshima (1988) also suggests that the abundance of hard-working, educated and well-trained workers in Asia was the determinant factor as it has provided a favourable condition for industrial expansion and growth. The experiences of countries such as Japan, Korea and Singapore, which have not much physical capital resources, have showed that the best usage of human resources (through industrial education and training) can lead to economic growth and development.

In GCC countries, the human resource factor, which differ from other developing countries where financial constraints represent the major obstacle for development, is regarded as the critical challenge for future development where those countries depend highly on migrant labour. The availability of financial resources and the presence of joint venture system represent a unique opportunity for GCC countries to improve the education and skill profile of the national labour force through the adoption of advanced technical, technological and industrial education and training to build up their technological capability and decrease their total dependency on migrant labour.

### **6.3. FEMALE PARTICIPATION:-**

The participation of the females in the labour force in industrialized countries exceed 40% and in USA (for example) about 50% of females in the working age participate in the labour force. In developing countries women participate highly in the rural agriculture while the example of the NICs is clear where women participate effectively in various industries such as clothing, textile and electronics. On the other hand, in GCC countries "the participation of local women in the total labour force in Kuwait and Saudia Arabia in 1980



was about 2.9% compared to 0.3% in the UAE" (Yas cited in Shihab, 1992: 39). Kubursi (1984:18) estimates that the women in GCC countries for somewhat less than half of the overall population where their participation in the labour force is as follows: 9.3% in Bahrain (1979), 11.6% in Kuwait (1975), 2.9% in Qatar (1970), 6% in Saudia Arabia (1980) and 3.4% in UAE (1975). This lower participation is attributed to the socio-cultural and religious structures of those societies which give no incentive for female participation.

Although few females in the region work as doctors, engineers and university lectures, the majority of the working females are engaged in education sector as teachers and in health sector. In Bahrain, the Ministry of Education in early 1970s adopted employment policy that permitted the national females teachers to dominate the primary education. This successful innovation step, which has been tried in Kuwait and Qatar, is regarded as a good example that intended to increase female participation and to create a suitable environment for national women employment in the modern sector as they did, before the exploitation of oil, in the traditional sector.

In Saudia Arabia, which the most conservative country in the Arab world, men and women are totally segregated at the work place. In study of 400 heads of families in 1984 72% of them did not agree on the work of women outside the house and 95% agreed that if husbands earned enough, women should not work. On the other hand "there is a clear implication for Saudi Arabian planners: dependency on migrant labour can be reduced significantly if women are utilized in the labour force (because) a growing body of educated women ....., the crude participation of Saudi Arabian females, even of higher education attainment, tend to be lower than elsewhere" (Ismail et al, 1983:36-42). In Bahrain May, S. (1994:423) argues that "There is also a conviction among professional women that the general employment policy of the government is to block the promotion of women even when they are better qualified and have had longer training and experience than men". Despite that, in Bahrain, unlike the other GCC countries except



Kuwait, women represent 20% of all government employees beside their high presence in education, nursing and banking. The total participation rate of female to total national labour force increased from 3.1% in 1971 to 8.8% in 1991. However, like other GCC countries, women participation in Bahrain remains small and the government confirms that "Women figured as an important element in shifting control of the job market to Bahraini nationals from expatriate workers as well as for projecting a modern image abroad" (Ibid p.421).

In UAE, females consisted 30.9% of the total population in 1980 and 35.1% in 1985 while the crude participation of female in the labour force increased slightly from 5.7% in 1975 to 8.8% in 1980. For the nationals, in 1975 only 2% of the females of the working age were in employment while only 5.9% were in fulltime education (Al-faris, 1985). Having the fact that total population of the UAE is small and the participation of the nationals in the labour force is less than 10% (as has been discussed in Chapter three and five), the real and wide participation of females in labour force become crucial issue in the country because they represent more than one third of the total population.

In Kuwait, the female participation, which also differ from other GCC countries, increased from 2% in 1970 to 10% where about 52% of them concentrated in educational and health services (Nasra, M. 1986 ). The clerical and related works are the second important job category for females. The ratio of female Kuwaiti in the labour force compared to non-Kuwaiti was increased from 30% in 1970 to 46% in 1980. In addition to that, Kuwaiti females participate efficiently in professional and technical works (45% in 1980 out of all Kuwaitis participation) and in clerical and related works (20% in 1980). Table 15 represents the occupational structure of employed persons during 1970-80 by sex and nationalities. It indicates the high participation of Kuwaiti female in professional and technical works and clerical jobs. However, this increased female labour participation comparing to male participation will lead to "reduce the dependence on foreign

workers in the future. For this to happen effectively, however, the occupational role of females would need to be broadened beyond the two in which they are currently employed" (Ibid p.826). These figures can be regarded as an indication of how female participation can benefit the total national labour force in GCC region.

### **6.3.2. EDUCATION AND FEMALE PARTICIPATION:-**

Generally, there is a strong relation between the education of females and their participation in the labour force. The high rate of illiteracy in the region restricts the female participation. However, due to their financial resources these countries have established large educational infrastructure which has decreased the illiteracy rates of the nationals through direct education and the presence of huge amounts of well-educated migrants. The education-female participation in the region is witnessed to be weak and in some GCC countries, in which education started earlier (Kuwait and Bahrain), the education has not encouraged women to enter the labour market. In Bahrain, in 1984 it has been estimated that 32% of the females with doctoral and master degrees, 22% of bachelor degree holders, 17% of diploma holders and 65% of secondary school degree were not engaged in any employment (Shihab, 1992). In addition to the lower female participation in the labour force, large number of the women in the region have shifted their domestic duties to the cheap Asian house maids and servants. The reason behind that, among other socio-cultural factors, is the lack of the main economic motive for seeking employment. On contrast to the past, all nationals in the region have enjoyed a high standards of living as a national right. A survey of 200 women in Bahrain (Ibid) in 1984 revealed that 50% of them agreed on financial motives for seeking employment, 39% only on self-satisfaction and 10% just working for killing the time. For Webster (1986:199), who blames the social structure and customs for low female participation, "Development for many ordinary women in the Gulf has meant the loss of their former economic roles and

stricter confinement within the stereotype of respectable seclusion. In the past, seclusion was an ideal that acquired Kudos because it was unattainable except by the very wealthy. Now that it is available to all it must lose its allure. There is nothing attractive about enforced boredom".

The promotion and encouragement of female participation in productive work in the region have to be searched within the socio-cultural backgrounds of those societies because true islamic values do not prohibit women from productive employment and where female participated highly, side by side with men, before exploitation of oil in all daily life activities. It would be more wiseable, rather than adopting Western values, to change the working environment to increase female participation such as the idea "that has been expressed in more than one Gulf Conference is the need for laws and regulations to enable Gulf women to work part-time so as to be able to participate in the labour force without unduly affecting their domestic duties" (Shihab, 1992:42). Other idea of George, S. (1986:171) states "segmentation work into modules and assigning such work on a cottage-like basis to women could resolve the cultural antipathy against employing women".

#### **6.4. SOCIAL VALUES AND ATTITUDES TO WORK:-**

The abundance of huge financial resources generated by oil wealth in the region has created a negative impacts on the work morale of the nationals where they have little inclination and desire to work in arduous occupations and production work. For example, in Kuwiat, where nationals both males and females are participate higher in the labour force compared to other GCC countries, Table 15 shows that the participation of national males and females in production and related works and labours) categories were decreased from 23.1% and 2.7% respectively in 1970 to 15.6% and 0.6% in 1980. On the other hand, the figures in the table indicate the higher concentration of Kuwaiti males in non-productive service and administrative jobs. Follow-up study of graduates

from the vocational training centres in Kuwait in 1974 showed that 49.2% of the total number of graduates neither accepted nor performed any kind of manual work. From total graduates from the wireless and telecommunication centre, where the cost per trainee was about \$ 15,385, almost 87% of students rejected manual work (Sheikha al-Misnad, 1985:131). In UAE, as has been discussed in Chapter five, the survey of 1985 showed that only 4.9% of the national labour force were technicians and only 0.4% of them were regarded as skilled labour.

Government employment policies, which providing jobs for nationals regardless to their qualifications, have led to the over-concentration in services and administrative jobs (white collar jobs) and the movement away from the production works (blue collar jobs). This scenario by turn has increased the dependency on foreign imported labour and has changed the social value of the manual work to be less desirable. The government working grantee for the nationals has led to create luxury employment where the nationals "have never really been required to compete in the modern labour market on economic terms. They have affectively gained a 'rent' from being nationals .....their remuneration being quite divorced from marginal productivity" (Ismail et al, 1983:27). For example, in Kuwait labour market segmentation and employment discrimination policies have led the Kuwaiti to earn on the average about 49% more than migrant non-Kuwaiti (despite they both have the same qualifications) as the result of their nationalities as Kuwaitis. Despite that, their productivity and efficiency are lower than migrants "with some reports have indicated that 'the 45,000 Kuwaitis in government services in 1970-71 had a per capita out put of 15 minutes for every six hours worked" (Sulayman, S. 1985:131). Hence, the 'Gulfanization' of the labour force which takes place without barrelled well-constructive HRD policies in the region will result only in underemployment of the national labour force. "The easy availability of jobs, the lack of competition, and the lack of an objective system of rewards and punishment are all likely to result in a low level of job commitment, and as

such low productivity, among the indigenous labour force. Continued dependency on imported labour may intensify this trend further" (Nasra, M. 1986:829).

It has been argued that there are certain factors which affect negatively stability of the labour force and decrease both workers commitment and morale. These factors are temporariness of migration, low degree of interaction between local and migrant labour, presence of various competing nationalities and the social disparity between different sections of the society. This leads to increase the labour alienation and "The impact of such an environment on the indigenous labour force is bound to be negative since the social relations within the work situation are likely to be based on mutual hostility and mistrust rather than on cooperation and trust." (Ibid, p.830).

GCC countries, according to (Hazem Beblawi 1990), are regarded as rentier states in which entire economic structure is based on external rent generated from oil mines and while the majority involve in distribution and utilization of that wealth, few participate in the generation of that wealth (rent). The function of the state in this respect is the distribution of the country's wealth. This mechanism has affected the nationals and creates the "rentier mentality" because "For the national worker the work-reward causation has no meaning. Reward is a matter of chance, a windfall, an isolated fact, and is not considered to be the end result of a long, systemic and organized process of work" (Biblawi cited in Robert, 1994:30-31). The direct result of that is lower productivity rates of the nationals and the domination of the migrant labour because "the renteir mentality has led the national worker away from blue collar positions where demand has been traditional high and towards white collar positions where demand has been relatively low" (Ibid).

Without changing the social attitudes towards work and without real participation of nationals of GCC countries, the pessimistic fiction future of the oil-based societies in the novel "Mudun al-Milh" (cities of salt) of Abdel-Rahman Munif can be materialized. According to him, oil-based societies are

built of salt and with the end of this oil resources these societies would crumble or melt away because they have "the ability to buy everything without being able to produce any thing, scorning work and dependence on others for securing the simplest needs of life....(a condition which) end in tragedy" (Munif cited in Ian, R. Nettton, 1986:220). He illustrates his novel's message by arguing "The tragedy is not in our having the oil, but in the way we use we use the wealth it has created and in the future awaiting us after it has run out ..... In developed countries like Britain and Norway. the oil "whim".....brings new strength to the community, but in underdeveloped societies.....oil becomes a damnation.....In twenty or thirty years' time ..... these giant cities built in the desert will find no one to live in them... (because) natural and continuous process from nomadic life to civilization actually not happens" (Ibid). The sudden unexpected wealth of the GCC region, which has changed their bedouin life into highly modern one, is not followed by barrelled socio-cultural change due to the new fast rhythm and mechanism of development and modernization.

In addition to sound HRD which have to be implemented to improve and upgrade the qualifications and skills of the nationals, the changing of the social attitudes towards blue collar jobs and production work is essential in increasing the value added participation of the nationals in the labour force and decreasing the total dependency on migrant labour. The education system, especially at the elementary level, can play a crucial role in reshaping and stressing the importance of the manual work. The socio-cultural and religious institutions of the societies and the media in those countries should play their national role in encouraging the real participation of the nationals in the development of their own countries and future. The additional training opportunities through efficient HRD packages, financial incentives and the restructuring of the employment policies will encourage, in harmony with the socio-cultural change, the participation of the nationals in technical occupations and increasing their



work morale and job commitment.

#### **6.5. EDUCATION AND TRAINING:-**

The availability of huge financial resources in the region has facilitated GCC countries to build large educational infrastructure within a short time. The substantial improvement in the qualitative profile of the national labour force entrants in the region during the periods 1976-1985 is presented in Table 16. The table shows continuous improvement in the qualification (education and training) of the nationals entrants to the labour market for professionals, technical and skilled and semi-skilled categories. During 1987-88 "Kuwait spent \$ 581 million on health, education and other social welfare activities, Saudia Arabia \$ 724.5 million and the UAE \$ 710 million" (Raffer and Salih, 1992:3). The literacy rates for the GCC countries in 1980 were as follows: 68.1% for Kuwait, 66.3% for UAE, 59.2% for Qatar, 49.9% for Bahrain, 38.3% for Oman and 33.5% for Saudia Arabia (ESCWA 1982). In UAE, for example, while in 1968 77% of the work force were illiterate, 12% with primary education, 8% with intermediate education and only 3% with higher level of education, illiteracy, according to Table 17, decreased from 41.2% in 1975 to 27.1% in 1985 and graduates and post-graduates increased from 5.8% to 10.4% during the same period. Despite huge improvement in HRD of the region, it was found in 1985 that only 18% of the total required manpower at the professional and technical level and 27% of the required sub-professional and technicians were provided by the national labour force. Moreover, Salem, M. (1986:128) agrees that the GCC's national labour force has poor educational profile which is regarded as "One of the striking feature of the labour force in general (in GCC) and the Kuwaiti labour force in particular is the low level of educational attainment..... available statistics reveal that the proportion of illiterate Kuwaiti in the labour force amounted to 35.9% in 1975 and 25.3% in 1990". GCC countries "are most unlikely to spend and improve the external and internal efficiencies of their



education and training systems to an extent sufficient to prevent increasing reliance on expatriate manpower in all but the least skilled of occupational levels....very huge proportions of labour force entrants will continue to have little if any education. The skill mix of labour market entrants continue to fall short of meeting the progressively higher occupational requirements of their economies" (Ismail et al, 1983:39-41).

The education structure of the region is characterized (Ibid) by a linear design where more concentration is directed to literature and arts with higher education (university) situated at the end "The modern education system adopted by Saudia Arabia and the Gulf states, moreover, has not been the type of system most suited to the needs of such rapidly developing countries.....Technical and vocational training are considered markedly inferior to general academic education, which the only means of achieving a university place" (Birks and Sinclair, 1979:305). This system, on contrast to the experiences of Japan and NICs, is inappropriate for modern economic development in the region which emphasises on diversification through industrialization. The reasons for the failure of this system are; firstly, this system gives higher social prestige to university education and underestimate the significance of the technological education where only dropout and academic-poor students are enter as a general belief. In addition to this, employment policies in all GCC countries encourage this education structure by offering priority employment opportunities to universities graduates. This by turn makes technical and vocational education less attractive because they lead only to socially undesirable manual employment and production jobs (blue collar jobs). Hence by that "the education system unfortunately contributes to this dilemma by its pronounced emphasis on training indigenou citizens for public service administration positions" (George, S. et al, 1986:169). The second reason for the failure of the education system is that the essential pillar of that system is memorization instead of

initiative and creativity which are highly required in industrial development. In addition to non-efficiency of the government employment and salaries policies in the region, Sheikha (1985:176) has criticized the structure of technical and vocational education because firstly, basic dichotomy between general education and technical education has been created in all GCC countries. Secondly, technical education has to be unsuitable and unproductive where the region "adopted plans which were applicable to other developing countries whose social and economic circumstances were different from those of the Gulf states".

Sheikha al-Misnad also (1985:130-131) argues that "From the evaluation of the data on general academic and technical/vocational education at secondary school level, it is evident that the technical education has been the less popular among Gulf Youth .....(on contrast to academic education) enrolment in this type of education has been declining steadily". In Kuwait, according to Kuwait University data for 1981-82, about 40% of males and 53% of females concentrated in literature on contrast to 12% and 33% of the non-Kuwaiti respectively with only 8% of Kuwaiti male and 29% of non-Kuwaiti students enrolled in engineering or petroleum studies. The 1985 survey showed 78% of the secondary school students favoured non-technical studies and only 17% favoured technical subjects. In 1991-92, the number of students in academic secondary schools of Qatar was 9869 compared to 546 students in the vocational secondary schools (ESCWA 1983-1992) and out of 6546 students in universities there were only 1094 in applied specializations. In Saudi Arabia, in 1991-92 while academic secondary education included 21533 teaching staff, the vocational educational had only 2573 teaching staff and "Approximately half of Saudi college students enrolled in the liberal arts and social science. At that time (during 1980s) the recipient of any bachelor's degree was essentially guaranteed government employment" (Donald, 1986:282). In Bahrain in 1991-92, out of 7140 university students there were only 332 students in medicine and 1715 in engineering

education. Data from Qatar University in 1976-77 indicated that only 14.6% of the total university enrolment was in the science-based courses (Sheikha, 1985:131). The fourth five-year plan (1985-90) in Saudia Arabia, as an example, was allocated a sum of 133.77 million Saudi Rials for education and training during that period (Ministry of Planning, Riyadh, 1985). The percentage distribution of this amount was as follows; 62% for general education, 30% for higher education, 5% for technical educational and vocational training, 1% for Institute of public administration, 1% for work force development and 1% for science and technology. It is clear from this figures the high rates of bias against technical education, vocational training and technology and work force development (which are responsible for creating a national industrial work force) where only 7% of the total amount was allocated to them and the figures from all GCC countries support this trend.

To generate more productive national labour force, emphasis have to be changed to technical industrial education which allows easier transfer and adaptation of experiences and technology. This can be done through expanding technical and vocational training (in accordance with efforts of work values reorientation) and increasing the on-job-training programmes. This measures have to be adopted in harmony with reoriented employment policies through salary levels, incentive schemes and efficient monitoring and management of the labour market. Human resource development becomes crucial for the region's development and all GCC countries have to "concentrate, for many years to come, on the development of scientific, technological and managerial skills at both country and Gulf region levels, for it is a generation of skilled Gulf people that will ensure diversification in the future" (Al-khalaf cited in Shihab, 1992:85). In addition to that, Sad-Addin (1980) regards human capital as important and critical factor in attaining future development goals. In all GCC countries higher education inside or outside the region is highly subsidized especially in foreign countries in Europe and USA

and "Unless carefully monitored, this trend may lead toward an acute mismatch between the training of young people and the jobs that are available to them" (Nasra, 1986:829-930).

Efficient and well-constructed human resource planning is highly required in the region and it should be developed at macro and micro levels. It should be emphasise fundamentally on reducing dependency on migrant labour and efficient gradually localization of the labour force particularly in less populated countries which depend extensively on migrant labour such as Kuwait and UAE. On the regional level, all GCC countries have to coordinate and link their human resource planning policies and strategies.

GCC countries have to benefit highly from opportunities offered to them by a cluster of various experiences and skills in the form of joint ventures and partnerships to train and upgrade the capabilities of their national labour force by well-establishing the training and technology transfer in the contracts with foreign companies because "In particular, those (nationals) who have been some time in the work force have a much lower educational profile than those now entering for the first time. Thus training programmes must be carefully structured to account for this sector" (Ismail et al, 1983: 41). The joint venture firms have a great capacity and potentials to upgrade skills of the local labour force because those "firms could provide the type of neutral-based training that reduces illiteracy, but the training should be conducted within the framework of islamic values.....Linkages between these firms and the host country's educational ministers could heighten the effectiveness of this reciprocally beneficial relationship" (George, S. et al, 1986:178). One successful example of that is the effort that the Royal Dutch Shell, which one of the owners of the Petroleum Development (Oman) firm, has played in training and upgrading the skills of the nationals in Oman. The company, encouraged by government, has adopted a training programmes in basic electrical and technical skills , radio operations, driving and the English Language and by the end of 1970s, 75% of the company's staff

were Omanis (Susanne, 1986:120).

#### **6.6. TECHNOLOGY:-**

The history of the industrialized European countries confirms the crucial and fundamental role that technology and technological revolution have played in growth and economic development where higher per capita output of industrial and manufactured goods are produced in value and as a percentage of the GDP.

Transfer of technology is defined as acquisition and adaptation of a technique from one country or industry to another and its application in the production process and when the technique has been localized and domesticised and utilized in production, the transfer becomes complete. The availability of the know-how (soft-ware technology), which means the ability and capacity to devise, to adapt and to produce at lower costs, in developing countries is regarded as the most important condition for technology transfer and can be achieved only by education (especially technical and industrial education), continuous training programmes and scientific researches in higher education institutions.

The transfer of technology, through joint venture system or key-turn contracts and by a cluster of diversified migrant groups, is handicapped by the weakness and inefficiency of universities and higher education institutions in GCC region which emphasise on quantity rather than quality. There is a total absence of efficient Arab university legacy that has been absorbed in the socio-cultural structure of the region and satisfied and suited the society's needs and real demands. It has been estimated that in the Arab World there are about 27,000 PHD holders (50% of them in science and engineering) and 30,000 to 40,000 research worker (Samir, N. 1983:128). Despite these large figures, the majority of doctoral education and researches have taken place out side the region (in Europe and USA) in different socio-cultural and economic environments from the prevailing in the region and this by turn has led half of them to leave the region and, on the

other hand, has also created a psychological and pro-western dependency which underestimate the local socio-cultural and religious institutions and indigenous capabilities. In the Gulf, university education for the nationals abroad has started earlier than university education in national universities and is still remain the main venue for the region's national students (Sheikha, 1985:285). On contrast to that, Japan's experience reveals "the development of higher education, and particularly scientific and technical education, in Japan a century ago did not proceed sporadically, sagltatorily, haltingly, or along segmented idiosyncratic lines. It was part and parcel of a well orchestrated drive to catapult Japan to the fore front of the industrialized powers of the day" (Samir, N. 1983:126). In addition to that, the scientific output in the region is very low and (Zahalan, 1980) estimates that "the average productivity of an Arab Scientist, measured in scientific publications, is less than 10% of his counterparts elsewhere". This situation has led the region to be consumer rather than producer of science and technology.

Since early 1970s, the GCC region has witnessed the development of higher education and by 1985, excluding Saudia Arabia, there has been six universities in the region. The impact of migration on higher education can be seen in the total dependency of these universities on imported staff and for example 83% and 94% of the academic staff of Kuwait and Qatar universities respectively are non-nationals (Sheikha, 1985:242-276). The Gulf Technical College in Bahrain, which was created in 1968 to provide post-secondary technical education for students from Bahrain and other GCC countries, has witnessed a small development in the previous two decades and for example in 1973/74 total full-time students were 166 male students and 6 females increased to only 264 and 283 male and female respectively in 1979/80 (Ibid p.167). The number of Kuwaitis in Kuwait Institute of Applied Technology, which opened in 176/77 and prepares technicians, increased from 79 students in 1976/77 to 375 in 1979/80.



The failure and weakness of higher education and research institutions are reflected in the industrial sectors in the region. Zahlan (1981), argues that the establishment of huge industrial projects in the region has not led to establish a strong technological base. Despite 584 oil-related and petrochemical projects were built in the region (most of them in GCC) during the previous three decades, the region has not developed and promoted indigenous (software and hardware) technologies to build such projects independently of foreigners. Zahlan findings are confirmed by Elias, H. (1987: 420) who shows that between 1963-1976 Arab region established 567 new petrochemical industries but in virtually non of them was there any real technological transfer that enabled the region to build similar projects. Robert Looney (1993:264) argues that "The absence of technological capacity accounts for the Arab states' inability to create a real partnership with the multinationals which execute 95% of the petro- and petrochemical projects in the Arab world".

To promote and adapt technology effectively in GCC, by creating the indigenous technological capabilities, the promotion and restructuring of education, as has been discussed earlier in this chapter, become essential because the present education structure emphasises on social sciences rather than natural science and technology. In addition to that, GCC countries have to pay more attention to the structure of R and D and higher education to make it more efficient, productive and adaptive to the socio-cultural and economic environment. Gulf countries, according to (R. A. Ajami, 1981:2), can manage to combine traditional culture along with the modern technology and efficiency and "The feeling that Islam is compatible with science, technology and modernization has been strong all along. Japan is an example used by many of our elites as a society that could adopt the efficiency of the West without sacrificing its own culture and modernization and connectedness with the multi-national firm". To increase the benefits from the joint venture system in building a sound technological base, these firms have to be



encouraged to establish link with local universities and research institutions and training centres to increase the applied research activities. The "turn-key" contracts should be modified to allow the internal local institutions participate in planning, designing and constructing the projects. Turn-key contracts have been criticized "in that it does not permit the local partner to be involved in the various stages of the establishment of the project and to benefit from the transfer of technology in the process" (Karam, 1982 cited in Shihab, 1992:103). The transfer of technology through both turn-key or joint venture types have been criticised because the foreign partner controls all technology matters and even the small rates of technology transfers have been passed to other migrant labour rather than local labour force. The sub-contract under the joint venture system have to be well protected and monitored to prevent the subcontracting of only relatively low-level technical activities, while the foreign firm undertakes the complex tasks which increase skills capabilities. GCC countries should and must insist foreign enterprises to adopt efficient and extensive on-job-training for national labour force and allow them participate at various levels in the project and this can be achieved through the strengthening of the training issues in the negotiation stage with multi national firms. As the result of that the educational, managerial, scientific and technical legacy gained by local nationals and institutions will be expand over time and hence increasing and promoting the indigenous technological and science base while allow efficient national labour force participation in the future. To decrease the total dependency on migrant industrial labour, the new emphasis of the GCC's industrialization has been shifted to highly capital intensive technology. In Saudia Arabia, "In all categories, for firms under construction ...(capital per worker is doubled for the newer plants).... The highly capital-intensive enterprises initiated in recent years reflect the adoption of the latest technology" (Donald, 1986:277-278). The 5-Year plan 1981-85 in UAE, which was not

adopted, emphasized totally on capital-intensive techniques as a major criteria for choosing industrial projects (Ministry of Planning 1981).

According to Kubursi (1984:115), "the region's import of engineering products increased from \$ 1,392 million in 1973 to \$ 13,420 million in 1978. During this period, the member countries spent an average of close to 14% of their GDP on imports of such products ..... the forecast for 1990 puts the amount for engineering products in the GCC region at \$ 22 billion ". As the result of that huge demand for engineering products, the development of technology in GCC countries is essential for the establishment of the engineering industries and capital goods.

Foreign firms can help the education and training institutions to develop relevant technology curricula (which is not alienated from the society's socio-cultural structures) and by providing the core technical and technological training because technology, on contrast to other goods, needs larger educational, science and research bases to be absorbed through to make it more adaptable to the local environment and conditions. However, joint venture system can help and assist the region in decreasing its dependency on migrant labour by developing small-sized high technology industries which suit the region and stimulated by the availability of huge financial resources and that type of industrialization will create a high-tech indigenous labour force. To make the small-scale high-tech manufacturing more successful, according to (George, S. et al, 1986:180), the participation of female labour, in which GCC countries invest highly, is crucial because female employees "could provide the administrative office support at facilities located apart from the primary core productive plants and their participation would not transgress present taboos about mixing the sexes at the work place.". Shihab (1992:104) argues for establishment of a central body, on national or GCC level, to be responsible for technology and research which advise and guide the agreements with foreign firms regarding transfer of technology (licences,

patents and trade marks). Moreover, this body could be responsible for other activities such as; advising industries on technology matters, patents and inventions registration, establishing technology centres, sponsoring research projects which related to local environment to adapt imported technologies and diffuse successful adaptive technologies, and encourage coordination and cooperation between various technological institutions and groups in the region. On the regional level, all GCC countries within GCC body (which has been discussed in Chapter one (1.2) should increase and strength their cooperation in field of technology, technology transfer, technical and vocational training programmes to economise on financial and manpower resources.

## SUMMARY AND CONCLUSION

Since the oil prices rises of 1973, Gulf countries have began huge development programmes to modernize their societies. Having the fact that the populations and indigenous labour force are small, the region has witnessed an influx of huge migrant flows which has been estimated to be 10% of the total world's migration or 7 million migrants in 1990. This migration influx has created various social, cultural, political and psychological impacts on the region's societies where the nationals of some GCC countries (Qatar, UAE and Kuwait) are outnumbered by migrants. The first migrant labour came from neighbouring Arab countries such as Egypt, Jordan, Yemen and Sudan. As the result of the shortage in Arab migrant labour supply, socio-cultural and political factors and economic factors (cost-effectiveness), the region has started the importation of labour from South Asia (India, Pakistan and Bangaladish). By the late 1970s, the "package system" or "work camp", which dominated by multinational firms from South Korea and Taiwan, was adopted. This system beside rotates workers around projects, tend to isolate migrants from nationals, minimize infrastructural costs and complete projects with optimum efficiency. Without the assistance of the migrant labour, which dominates the economies of the region, development in GCC countries (social and education infrastructures, construction and industrialization) can not proceed. In the mid-1970s the migrant labour was largely correlated with development of oil and construction sectors and by 1980 the situation had not changed appreciably (the exception was Saudia Arabia and Kuwait where greatest declines in construction activity took place). Over the period 1980-85, migrant labour participated highly in the expansion of the manufacturing sector and their contribution to construction had declined in all GCC countries. In recent years, there is a little evidence "that the manufacturing sector will be able to expand its relative role in these economies without the continuing of significant inflows of foreign workers" (R.

Looney, 1993:46). However, for all GCC countries, "An open attitude to the employment of foreign, highly skilled and productive staff must not, of course, become an excuse for the failure to train local people to positions of responsibility. However, it is one of the costs of smallness that localization takes longer and can not go as far as in a larger country" (Helen, 1984:93). As the result of the socio-cultural, political and psychological impacts of migrant labour on nationals and to decrease the total dependency on migrant labour, all GCC countries have started the localization policies. However, higher rates of localization, (given the structure of the Gulf economies, population and demographic structure, education and socio-cultural structures which disincentive manual work and female participation), would not be obtained in near future. Naturalization (Robert, 1994) can be regarded as a good option and more prominent tool that can be used to achieve demographic balance. Localization has to be undertaken in efficient harmony and coordination with human resources development process in order to prevent the negative effects on the standard of performance or achievements of the economy

Industrialization in GCC countries is the driving force for diversification plans which aim to change the structure of the economy that has been heavily dependent on oil exportation and hence subject to various damaging impacts of the oil prices fluctuations. The comparative advantages of the industrialization in the region are the availability of cheap source of energy (oil and gas which otherwise be wasted by flaring), abundance of raw materials which can be used in oil-related industrialization (petrochemical and fertilizer) and the availability of huge financial resources to import technology and skills. Since all GCC countries are poor in resources other than hydrocarbons (where agricultural option does not exist), the region has little choice but to concentrate its industrialization on hydrocarbon resources. The major industries in the region are petrochemicals, fertilizers, cement, iron and steel and aluminum industries.

The diversification policies have changed the structure of the GCC's economies where the share of the oil sector in the total GDP decreased from 70% in early 1970s to 40% in 1995 while manufacturing increased from 2% to 9% during the same periods. This has been resulted from the establishment of huge industrial infrastructure during 1970s and 1980s and the huge industrial investments which have been directed to industrialization (the per capita contribution of industry to GDP in 1983/84 raised from \$ 190 to \$ 834). Moreover, the joint venture system, where overseas partners are attracted by various generous government incentives, plays crucial role in the region's industrialization. Beside the transfer of technology and experiences from the whole globe to the region, this system benefiting the region's industrialization by marketing much of the oil products and petrochemicals, by subjecting 30% of the total contracts to national subcontractor beside the usage of the local raw material and services, and by upgrading technical and technological capabilities of the national labour force.

However, "the UAE (and all GCC countries) needs to industrialize to diversify, to benefit from wasted gas, and above all to train its citizens for the post-oil era. We believe that training of the people of the country is probably the most important long-term consideration in industrialization strategy." (Shihab, 1992:115). Hence the region has to grasp this unique opportunity available by oil wealth to build sound industrialization base and before that to create a national productive industrial labour force, which is regarded as the most important long-term goal, which can manage the economy in the future after the oil-era and independently from migrant labour.

For industrialization to be more efficient and useful to other sectors of the economy, greater considerations have to be given to horizontal and vertical linkages. On the regional level, it is impossible for individual GCC countries to industrialize their economies independently due to demographic, market size and cost-effectiveness factors. To

avoid duplication and white elephants projects and to create efficient and internationally-competitive industrialization, I argue for further economic integration within GCC frame to allow more cooperation and coordination where each member country should specialize in specific industries where it has comparative advantage. In addition to that, cooperation should include purchasing of raw materials and technologies, industrial development researches, marketing and HRD planning. GCC countries should establish strong links with other developing countries (with huge market base) to solve the marketing problems of their industrial products and to avoid restrictions and competition in industrialized countries' markets particularly in petrochemicals and fertilizers products because the future prospect and growth of the GCC's industrialization are highly related to international markets and trade which has been restricted by small-sized internal market. moreover, this link will allow the region to reap the benefits of economies of scale in the major industries (cement, petrochemicals, fertilizers, aluminum and iron and steel).

The sudden oil wealth has led GCC countries to invest highly in (social, welfare, educational and industrial) infrastructure where labour force shortage is solved by migrant labour. This process reverses the normal procedure of development where human capital formation accompanies or precedes the development of economic sectors (e.g. industry). Although the achievement of creation national productive skilled labour force requires generations (through efficient HRD programmes and high investment in technical, vocational and technological education), the region should start and implement efficient HRD programmes as quickly as possible. However, the economies of the GCC (especially industrial sector), in order to maintain the growth rates in GDP as well as the standard of living, will be dependent on migrant labour due to the following factors; firstly, demographic factors where the populations are characterized by smallness in size and young in structure; secondly, the low level of women



participation in the labour force and social attitude towards manual and technical jobs, and thirdly, inadequacy of the education and training system in creating a sufficient skilled manpower in the region and the non availability of the skills mixture which are highly required by heavy industry and high-capital intensiveness techniques. The last factor is the high cost and lower productivity of national labour compared to migrant labour.

The promotion and encouragement of females participation in the labour force, where females represent high proportion in the GCC's population, is crucial for reducing dependency on migrant labour. Required measures have to be taken to create a suitable socio-cultural environment for their productive participation in the work force.

The oil wealth-related negative impacts which change the social values and attitudes of manual and technical jobs to be socially less-desired by the nationals have to be changed through various society's institutions. The removal of the "rentier mentality" will lead to increase nationals value-added participation in the labour force and promote both work morale and job commitment. There is a rising necessity in the region for reformation and re-evaluation of the employment policies for nationals to encourage efficient and productive participation and disincentive luxury employment. Both welfare unemployment (where nationals are receive high salary without working and as a nationality right) and welfare underemployment (whereby the productivity and efficiency of the nationals, compared with migrants, are extremely very low) have to be avoided.

The structure of education, which emphasis on social science, has not been in harmony with the economic development of the region that emphasis on diversification through industrialization because it underestimates the significance of the technical, vocational and technological education which responsible for the generation of the skilled-industrial labour force. Looney (1991:145) argues that "reforms of both educational system and in the hiring practices of government

agencies will be critical to restoring increases in productivity and ultimately expanded rates of non-oil income". However, GCC countries have to change their education and training systems where technical industrial education, which allows easier transfer and adaptation of technology and minimize total dependency on migrant labour, should be given more attention to create national technical, technological and scientific skills. Efficient and well-constructed human resource planning is highly needed on national and regional levels to economize on resources and to build strong HRD link within GCC countries.

The joint venture system is regarded as a unique opportunity for technology transfer and hence building an efficient industrial base in the region. However, many steps have to be taken to increase the benefits from that system; firstly, links have to be established between foreign firms and local universities, research institutions and training centres to develop relevant technology curricula and provide the core technical and technological training. Secondly, the sub-contracts should be protected to prevent the subcontracting of only relatively low-level technical activities and those firms should adapt efficient on-job-training for nationals and allow them participate in various levels of the project and all these issues have to be strengthened in the negotiation stages with multinational firms. Beside the promotion of skills profile of the nationals, the investment in labour-saving technologies is highly recommended to reduce the expatriate labour force. In addition to that, a central technology body, on both national and regional levels, is highly needed to guide, advise, develop and promote technology, technology transfer and indigenous technological capabilities and to encourage the cooperation and coordination between various technological institutions in GCC countries. The development of engineering industry is highly required to make it possible for the region to attain certain degree of technological independence and promote the transfer and assimilation of technologies.

It has become evident that the national human capital formation becomes the critical factor for future development of the GCC countries especially after the oil-era. Generally, sound education and training for nationals (with motivational factors), encouragement of the productive females participation in the labour force, promotion of technological capabilities and research and the reorientation of the social attitudes towards the manual and technical jobs, I think, represent the one way direction for the region, given the demographic structure, to minimize and reduce the total dependency on migrant labour and maintaining the development of the GCC's economies simultaneously.

"The region's greatest challenge will be the battle to harness and direct into productive channels the rich resources of the human mind. It is an energy of far greater potential than the "black gold" of the Arabian Peninsula" (Joy, W. 1986:237).

APPENDIX  
TABLES AND FIGURES

TABLE 1

Migrant workers in the Arab region by country of employment and region of origin, 1975

Country of employment	Arab		Asian								Other				Total					
			Pakistan		India		Other Asian		All Asian		Europe and America		Africa and other		Turkey		Iran			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Saudi Arabia	699 900	90.5	15 000	1.9	15 000	1.9	8 000	1.0	38 000	4.9	15 000	1.9	10 000	1.3	500	0.6	10 000	1.3	773 400	100.0
Libyan Arab Jamahiriya	310 350	93.4	4 500	1.4	500	0.2	500	0.2	5 500	1.7	7 000	2.1	500	0.2	9 000	2.7	—	—	332 350	100.0
United Arab Emirates	62 000	24.7	100 000	39.8	61 500	24.5	2 000	0.8	163 500	65.0	5 000	2.0	—	—	—	—	21 000	8.3	251 500	100.0
Kuwait	143 280	68.9	11 038	5.3	21 475	10.3	1 103	0.5	33 616	16.2	2 028	1.0	107	0.1	37	0.0	28 933	14.0	208 001	100.0
Qatar	14 870	27.7	16 000	29.8	16 000	29.8	2 000	3.7	34 000	63.3	846	1.6	—	—	—	—	4 000	7.4	53 716	100.0
Bahrain	6 200	21.2	6 680	22.8	8 943	30.5	981	3.3	16 604	56.7	4 442	15.2	57	0.2	—	—	1 982	6.8	29 285	100.0
Jordan (East Bank)	32 800	99.7	—	—	—	—	—	—	—	—	100	0.3	—	—	—	—	—	—	32 900	100.0
Oman	8 800	12.4	32 500	46.0	26 000	36.8	200	0.3	58 700	83.0	2 800	4.0	—	—	—	—	400	0.6	70 700	100.0
Yemen	2 350	95.9	—	—	—	—	—	—	—	—	100	4.1	—	—	—	—	—	—	2 450	100.0
Iraq	15 200	23.1	5 000	7.6	5 000	7.6	—	—	10 000	15.2	500	0.8	—	—	—	—	40 000	60.9	65 700	100.0
<b>Total</b>	<b>1 295 750</b>	<b>71.2</b>	<b>190 718</b>	<b>10.5</b>	<b>154 418</b>	<b>8.5</b>	<b>14 784</b>	<b>0.8</b>	<b>359 920</b>	<b>19.8</b>	<b>37 816</b>	<b>2.1</b>	<b>10 664</b>	<b>0.6</b>	<b>9 537</b>	<b>0.5</b>	<b>106 315</b>	<b>5.8</b>	<b>1 820 002</b>	<b>100.0</b>

— = no migrants recorded for this country or region.

SOURCE: Birks and Sinclair, 1980:137

TABLE 2

## LABOR MIGRANTS TO THE MIDDLE EAST FROM SELECTED ASIAN COUNTRIES, 1975-83

	Labor Migrants to the Middle East					All Foreign Labor Migrants	
	India	Korea	Philippines	Sri Lanka	Thailand	Bangladesh	Pakistan
1975	NA	6,466	1,552	NA	984	NA	23,077
1976	4,200	21,269	7,812	526	1,287	6,087	41,690
1977	22,900	52,247	25,721	633	3,870	15,725	140,522
1978	69,000	81,987	34,441	8,082	14,215	22,809	130,525
1979	171,000	99,141	73,210	20,980	8,329	24,485	125,507
1980	236,200	120,535	132,044	24,053	20,475	30,573	129,847
1981	276,000	138,310	183,582	47,800	23,848	55,787	168,403
1982	239,545	151,583	210,972	NA	105,143	62,805	142,945
1983 (Jan.- June)	(119,000)	(NA)	(161,699 <sup>b</sup> )	(NA)	(40,199)	(32,920)	(NA)
Stock (1981)	800,000	171,040	342,300	50,000	159,000	178,500	800,200

SOURCE: Fred, A. and Nasra, M. 1984:294

TABLE 3

REMITTANCES FROM LABOR MIGRANTS IN RELATION TO MERCHANDISE EXPORTS  
AND GNP: SELECTED ASIAN COUNTRIES

	Year	Remittances		
		Total (millions of U.S. dollars)	As a percent of merchandise exports	As a percent of GNP
Bangladesh	FY 1981	377	53.0	3.4
India	FY 1980	1,600	19.9	1.1
Korea	1980	1,292	7.4	3.9
Pakistan	FY 1981	1,900	69.9	8.8
Philippines	1980	774	13.5	3.1
Sri Lanka	1980	137	12.7	3.6
Thailand	1981	450	7.2	1.2

SOURCE: Fred, A. and Nasra, M. 1984:300

TABLE 4

## Non-nationals' Share of Employment by Economic Sector and Major Labor-importing Country, 1975 and 1985

(percent)

Country	Agriculture		Mining and quarrying		Manufacturing		Utilities		Construction		Trade and finance		Transport and communications		Services		Total	
	1975	1985	1975	1985	1975	1985	1975	1985	1975	1985	1975	1985	1975	1985	1975	1985	1975	1985
Bahrain	27.7	30.9	35.1	49.7	41.0	50.4	8.6	26.7	44.0	63.3	32.5	56.5	32.9	48.7	42.0	53.7	37.0	53.9
Kuwait	47.0	45.5	63.4	66.7	90.5	78.4	72.0	72.9	94.6	75.8	83.3	74.0	70.9	65.8	60.6	59.6	70.8	66.1
Libya	15.1	37.8	34.9	37.9	45.7	48.9	30.9	41.1	80.1	67.6	18.9	40.5	36.1	37.0	25.2	49.5	38.2	50.8
Oman	15.7	19.6	46.7	58.3	85.7	34.1	88.6	47.0	87.9	70.3	85.4	63.5	69.6	45.4	70.8	44.3	53.7	41.7
Qatar	67.5	76.6	84.9	85.3	98.9	92.6	74.3	81.4	96.3	91.8	92.8	88.4	72.6	81.7	71.0	82.8	83.1	86.1
Saudi Arabia	6.1	39.8	13.9	46.7	60.2	63.2	39.8	60.4	69.0	56.7	55.2	58.3	47.0	59.2	42.9	60.0	34.0	51.8
U.A.E.	52.7	64.7	87.0	91.9	95.6	95.0	75.0	86.0	97.6	95.5	89.7	90.7	82.5	89.4	72.6	83.6	84.7	90.2
Total	9.2	38.5	36.8	54.7	66.8	61.3	46.2	59.0	78.6	69.7	57.5	62.5	48.9	58.5	45.7	57.9	44.0	56.8

SOURCE: Birks and Sinclair, 1980:164



TABLE 5

## Kuwait: Skill Profile of the Labor Force

<i>Occupation</i>	<i>1975</i>			<i>1980</i>		
	<i>Kuwaiti</i>	<i>Non-Kuwaiti</i>	<i>Total</i>	<i>Kuwaiti</i>	<i>Non-Kuwaiti</i>	<i>Total</i>
Professional & Technical	9,739	32,097	41,836	16,098	62,163	78,261
Administrative & Managerial	1,045	1,809	2,854	2,112	4,102	6,214
Clerical & Related	17,853	20,165	38,018	24,637	35,541	60,178
Sales	6,185	17,908	24,093	5,196	25,843	31,039
Services	32,900	45,400	78,300	37,574	76,559	114,133
Agricultural	3,897	3,805	7,702	3,870	5,956	9,826
Production & Related	15,348	90,260	105,608	13,987	170,406	184,393
Undefined	4	-	4	-	-	-
Total	86,971	211,444	298,415	103,474	380,570	484,044

Note: New unemployed are excluded.

SOURCE: George, S. Rokis and Patrick, J.

1986: 129

TABLE 6

MIGRANT WORKER COMMUNITIES IN GCC COUNTRIES  
 BY REGION OF ORIGIN (PERCENT OF TOTAL): 1975 AND 1985 COMPARED

Region of Origin	1975	1985
Other Arab Countries	65.0 percent	30.1 percent
South Asia*	12.1 percent	43.0 percent
East Asia**	1.3 percent	20.3 percent
Other***	12.1 percent	6.6 percent
TOTAL NUMBER: (all countries)	(1.320.400)	(5.146.800)

\* India, Pakistan, Bangladesh, Sri Lanka, Nepal

\*\* Philippines, Indonesia, Thailand, other East Asia

\*\*\* US, Europe, Africa, other outside Arab world and Asia

SOURCE: J. Addleton, 1991:522

TABLE 7

**Dubai: employment estimates for Jebel Ali by major occupational category, 1981-85**

Occupational category	1981	1985
Management, professional and technical workers	4 800	10 550
Supervisors, skilled manual workers, foremen and office workers	14 250	29 200
Semi-skilled manual and office workers	24 450	53 850
Total	43 500	93 600
Associated population	67 600	160 100

SOURCE: Ismail, S. et al, 1983:33

TABLE 8

### Changes in the Gross Domestic Product of Selected Oil States Between 1970 and 1977

Country	Total GDP in 1970 (in Millions of \$s)	Total GDP in 1977 (in Millions of 1970 \$s)	Percentage Change in GDP (constant \$s)
Bahrain	244	354	45
Kuwait	2,691	13,013	384
Libya	3,991	19,360	385
Oman	278	2,527	809
Qatar	302	2,864	848
Saudi Arabia	3,866	43,985	1038
United Arab Emirates	1,470	13,288	804

**SOURCE:** Table 1, p. 19, of Atif Kubursi, "Arab Economic Prospects in the 1980s," Institute for Palestine Studies, Beirut: 1980.

TABLE 9

*Contribution of manufacturing sectors to GDP in the GCC countries (percentage)*

	<i>1980</i>	<i>1982</i>	<i>1983</i>	<i>1984</i>	<i>1985</i>
S. Arabia	5.0	4.3	5.8	7.5	8.3
Kuwait	5.9	6.6	6.4	6.3	6.6
UAE	3.8	8.2	8.7	8.7	9.0*
Oman	0.7	1.4	2.3	2.8	3.2
Bahrain	11.5	11.3	11.5	11.8	12.0*
Qatar	3.3	5.0	6.0	6.0	6.5*

SOURCE: H. T. Azzam, 1988:122

TABLE 10

	Licences issued to date	United Kingdom	Benelux	France	Germany	Ireland	Italy	Austria	Switzerland	Scandinavia	Other European	USA/North American	China	Korea	Japan	Taiwan	Other S.E. Asian	Arab States	India and Pakistan	Not elsewhere specified	Total of foreign firms in sector	Approximate % of firms with foreign investment (rounded)
Foodstuffs, drinks and tobacco	540	4	-	3	4	3	3	1	-	9	-	3	-	1	-	-	-	21	-	1	54	10%
Ready made clothes and textiles	83	1	-	-	-	2	-	2	-	-	-	1	-	-	-	-	-	9	-	1	16	19%
Manufacture of leather products	33	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	4	12%
Manufacture of wood products	114	1	1	-	-	-	-	-	-	-	1	-	-	3	1	-	-	10	-	-	17	15%
Manufacture of paper products, printing and publishing	152	1	-	1	1	-	-	-	1	-	-	-	-	-	-	-	1	20	-	-	25	16%
Chemical industry including petro-chem, coal, rubber and plastics	395	5	3	1	5	-	2	-	15	9	-	24	-	1	2	-	1	21	4	3	96	24%
Manufacture of china, pottery, glass, etc.	21	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	2	-	-	3	14%
Manufacture of building materials	662	6	5	5	12	-	7	2	6	10	-	8	-	1	-	1	2	34	2	11	112	17%
Metal industry	571	10	1	1	10	-	5	1	6	5	2	11	-	1	3	-	3	52	4	7	112	21%
Manufacture of other products	221	5	1	5	1	-	2	-	3	-	-	14	-	-	-	1	-	30	5	2	69	31%
Shipbuilding and repairs, automotive and automotive parts, railways, bicycles	79	1	-	2	1	-	-	-	1	-	-	1	-	-	1	-	-	7	-	1	15	19%
Storage	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Percentage of licenced companies with foreign participation – 18%.

### Foreign participation in joint ventures in Saudi Arabia by nationality and industrial sector, 1985

SOURCE: H. T. Azzam, 1988:138

TABLE 11

LOCATION OF SOUTH KOREAN FIRMS AND ESTIMATED COST OF CONTRACTS  
(1979-1981)

COUNTRY	COMPANY	COST OF CONTRACTS (MILLIONS OF US\$)
SAUDI ARABIA	Lucky Dev. Co. (1978) <sup>1</sup>	\$1 107
	Samsung Group	NA
	Hyundai (1975) <sup>1</sup>	1 400
	Miryung Co.	1 100
	Samick Corp. (1974) <sup>1</sup>	NA
	ICC Corp. (1979) <sup>1</sup>	NA
	Jung Woo	NA
	Samho	522. 4
	Chon Engineering Co.	NA
	Hanyang Corp.	1 500
You One Construction Co.	447. 1	
KUWAIT	Samsung	NA
	ICC Corp.	NA
	Hanyang Corp.	100
UAE	Samsung	NA
	ICC Corp.	NA
EGYPT	Samsung	NA
IRAN	Samsung	NA
LIBYA	Samsung	NA
	Daewoo Dev. Co. (1978) <sup>1</sup>	1 438
BAHRAIN	Hyundai	209
IRAQ	Hyundai	499
	Dong Ah	55
QATAR	Jung Woo	NA

NA = Not available.

<sup>1</sup> Initial year of involvement in the country.

SOURCE: L. Huan-ming, 1984: 29



TABLE 12

Employment by Types of Industry (2 digit),  
1978, 1981 & 1985

Industry (3 digit)	1978		1981		1985	
	No. of estabs.	No. of workers	No. of estabs.	No. of workers	No. of estabs.	No. of workers
Food, beverages and tobacco	49	2750	73	4408	80	5254
Textiles and wearing apparel	43	725	67	1045	47	808
Wood, furniture, wooden products	61	1743	86	2981	52	2064
Paper, paper products, publishing	43	2154	65	3592	64	3157
Chemical, plastic, petro- leum products	30	1881	61	3489	74	4381
Non-petroleum non-metallic minerals	95	5193	135	7167	137	7972
Basic metal industries	1	66	-	-	6	1893
Metal fabrica- tion, machinery, equipment	99	4619	165	7545	148	12798
Other manufacturing industries	2	82	6	586	14	717
<b>Total</b>	<b>423</b>	<b>19213</b>	<b>658</b>	<b>30813</b>	<b>622</b>	<b>39044</b>

SOURCE: Shihab, 1992:49

GDP REAL GROWTH BY ECONOMIC SECTOR, 1975-86 (UAE). (MILLION Dh/CONSTANT 1980 PRICES).

TABLE 13

	1975		1976		1977		1978		1979		1980		1981		1982		1983		1984		1985		1986	
	value	%	value	%	value	%	value	%	value	%	value	%	value	%	value	%	value	%	value	%	value	%	value	%
Agriculture, Livestock & Fishing	367	480	30.8	563	17.3	649	15.3	732	12.8	827	13.0	1020	23.3	1079	5.8	1236	14.6	1400	13.3	1525	8.9	1617	6.0	
Crude oil and Mining & quarrying	35938	39611	10.2	41862	5.7	37824	-9.6	52724	39.4	70767	34.2	65504	-7.4	53487	-18.3	45255	-15.4	47327	4.6	45606	-3.6	25621	-43.8	
Manufacturing	472	702	48.7	1923	173.9	2274	18.3	2542	11.8	4191	64.9	7990	90.6	9251	15.8	9116	-1.5	9655	5.9	9443	-2.2	8695	-7.9	
Electricity & Water	287	392	36.6	547	39.5	792	44.8	1122	41.7	1297	15.6	1309	0.9	1710	30.6	1742	1.9	2025	16.2	2225	9.9	2270	2.0	
Construction	4770	4746	-0.5	7381	55.5	9749	32.1	9753	0.0	9834	0.8	9615	-2.2	9692	0.8	10250	5.8	11650	13.7	9022	-22.6	8652	-4.1	
Wholesale, retail trade & restaurant, hotels	4940	6631	34.2	9054	36.5	8046	-11.1	8316	3.4	9094	9.4	10384	14.2	10295	-0.9	9574	-7.0	9251	-3.4	9025	-2.4	9084	0.7	
Transport, Storage & communication	1608	2295	42.7	2915	27.0	3188	9.4	3552	11.4	3731	5.0	3909	4.8	3880	-0.7	3647	-6.0	3890	6.7	3950	1.5	4075	3.2	
Finance & Insurance	225	496	120.4	721	45.4	184	-74.5	354	92.4	720	103.4	1920	166.7	2440	27.1	3070	25.8	2852	-7.1	4204	47.4	2933	-30.2	
Real Estate	1326	1667	25.7	2044	22.6	2482	21.4	2956	19.1	4006	35.5	4584	14.4	4476	-2.4	5707	27.5	5657	-0.9	5022	-11.2	4488	-11.6	
Government service	2551	3761	47.4	4189	11.4	4496	7.3	5125	14.0	5989	16.9	8104	35.3	8830	9.0	9491	7.5	9865	3.9	10792	9.4	10837	0.4	
Other services	570	656	15.1	757	15.4	822	8.6	883	7.4	1014	14.8	1349	33.0	1467	8.7	1779	21.3	1834	3.1	1990	8.5	2123	6.7	
Total	53054	61437	15.8	71956	17.1	70506	-2.0	88059	24.9	111470	26.6	115688	3.8	106607	-7.8	100867	-5.4	105406	4.5	102804	-2.5	80395	-21.8	
Non-oil sector	17234	21981	27.5	30298	37.8	32884	8.5	35555	8.1	40938	15.1	50446	23.2	53426	5.9	55937	4.7	58451	4.5	57534	-1.6	55073	-4.3	

SOURCE: Fatima AL-Shamsi, 1992:8

TABLE 14

Some Important Indicators of the UAE's Manufacturing Sector ( M Dh/1980 prices )

	1975		1980		1985	
	Value / no.	% of total	Value / no.	% of total	Value / no.	% of total
No. of establishments	423	-	658	-	-	-
GDP	471.9	0.9	4, 191	3.8	9, 443	9.2
Gross fixed capital formation	3, 012.8	19.5	9, 983	30	9, 938.9	n.a.
Production value	1, 163.7	1.9	6, 900	5.1	18, 810.5	13.9
Value added	472.1	0.1	4, 191	3.8	9, 329.6	9.3
Employment	17, 205	5.9	47, 573	7.2	61, 534	6.3

SOURCE: Fatima AL-Shamsi, 1992:20

TABLE 15

## OCCUPATIONAL STRUCTURE OF EMPLOYED PERSONS AGE 15 YEARS AND OVER BY SEX AND NATIONALITY, 1970 &amp; 1980

Occupation	1970						1980					
	Kuwaiti			Non-Kuwaiti			Kuwaiti			Non-Kuwaiti		
	Male	Female	% Female in occu- pation	Male	Female	% Female in occu- pation	Male	Female	% Female in occu- pation	Male	Female	% Female in occu- pation
Professional and technical workers	4.8	48.7	26.3	9.6	45.0	29.8	10.1	52.0	44.7	13.4	36.2	28.1
Administrative and managerial workers	1.1	0.2	0.5	0.7	0.1	0.6	2.2	0.4	3.3	1.2	0.1	1.4
Clerical and related	19.1	22.1	3.9	9.7	7.3	6.3	21.8	35.1	19.7	8.9	12.0	16.3
Sales workers	11.3	0.9	0.3	9.0	0.8	0.8	5.8	0.3	1.0	7.7	1.0	1.9
Service workers	39.3	25.2	2.2	17.6	42.3	17.7	40.2	11.2	4.1	15.9	50.1	31.6
Agriculture, etc.	1.5	0.3	0.7	1.9	b	0.2	4.2	0.3	1.0	1.8	0.0	0.2
Production and related workers and laborers	23.1	2.7	0.4	51.5	4.5	0.8	15.6	0.6	0.6	51.0	0.5	0.2
Number <sup>a</sup>	57,845	2,016	3.5	161,014	14,470	9.0	89,669	13,829	13.4	332,334	48,274	12.3

Notes: <sup>a</sup> Excludes not adequately defined and unemployed persons.

<sup>b</sup> 0.03 percent.

SOURCE: Nasra, m. s. 1986:827

TABLE 16

## Projected Education and Training System Supplies by Occupational Level and Labor-importing Country, 1976-80 and 1981-85

Country and period		Professional and technical (A-1)	Other professional (A-2)	Sub-professional and technical (B-1)	Other subprofessional (B-2)	Skilled office and manual (C-1)	Semi-skilled office and manual (C-2)	Unskilled (D)	Total
<b>Bahrain</b>									
1976-80	Number	460	1,210	1,250	700	4,780	7,760	1,810	17,970
	Percent	2.5	6.7	7.0	3.9	26.6	43.2	10.1	100.0
1981-85	Number	1,010	2,140	1,020	810	5,750	8,210	1,980	20,920
	Percent	4.8	10.2	4.8	3.9	27.5	39.3	9.5	100.0
<b>Kuwait</b>									
1976-80	Number	1,060	3,290	680	3,590	6,170	15,540	6,460	36,790
	Percent	2.9	8.9	1.8	9.8	16.8	42.2	17.6	100.0
1981-85	Number	2,870	3,860	900	5,160	9,640	19,000	7,400	49,130
	Percent	5.8	7.9	1.8	11.1	19.6	38.7	15.1	100.0
<b>Libya</b>									
1976-80	Number	1,130	4,200	5,410	8,110	14,130	82,790	22,540	138,340
	Percent	0.8	3.0	3.9	5.9	10.2	59.9	16.3	100.0
1981-85	Number	1,680	2,950	16,810	27,120	27,630	135,720	16,430	228,340
	Percent	0.7	1.3	7.4	11.9	12.1	59.4	7.2	100.0
<b>Oman</b>									
1976-80	Number	200	470	50	30	3,720	9,060	17,210	30,740
	Percent	0.6	1.5	0.2	0.1	12.1	29.5	56.0	100.0
1981-85	Number	400	750	450	50	7,950	19,110	9,330	38,040
	Percent	1.1	2.0	1.2	0.1	20.9	50.2	24.5	100.0
<b>Qatar</b>									
1976-80	Number	430	890	170	300	750	1,500	1,300	5,340
	Percent	8.1	16.7	3.2	5.6	14.0	28.1	24.3	100.0
1981-85	Number	550	790	180	240	1,270	1,660	1,360	6,050
	Percent	9.1	13.1	3.0	5.0	20.9	27.4	22.5	100.0
<b>Saudi Arabia</b>									
1976-80	Number	3,110	10,510	3,550	20,980	23,410	59,220	209,920	330,700
	Percent	0.9	3.2	1.1	6.3	7.1	17.9	63.5	100.0
1981-85	Number	11,510	21,570	9,320	48,820	50,270	102,690	162,290	406,470
	Percent	2.8	5.3	2.3	12.0	12.4	25.3	39.9	100.0
<b>U. A. E.</b>									
1976-80	Number	70	500	270	190	1,010	7,100	3,530	12,670
	Percent	0.6	3.9	2.1	1.5	8.0	56.0	27.9	100.0
1981-85	Number	220	580	230	70	1,590	11,050	2,490	16,230
	Percent	1.4	3.6	1.4	0.4	9.8	68.1	15.3	100.0
<b>Total</b>									
1976-80	Number	6,460	21,070	11,410	33,900	53,970	182,970	262,770	572,550
	Percent	1.1	3.7	2.0	5.9	9.4	32.0	45.9	100.0
1981-85	Number	18,240	32,640	28,910	82,570	104,100	297,440	201,280	765,180
	Percent	2.4	4.2	3.8	10.8	13.6	38.9	26.3	100.0

SOURCE: Ismail, S. et al, 1983:40

TABLE 17

Educational Status of Labour Force in the UAE, 1975,  
1980 and 1985

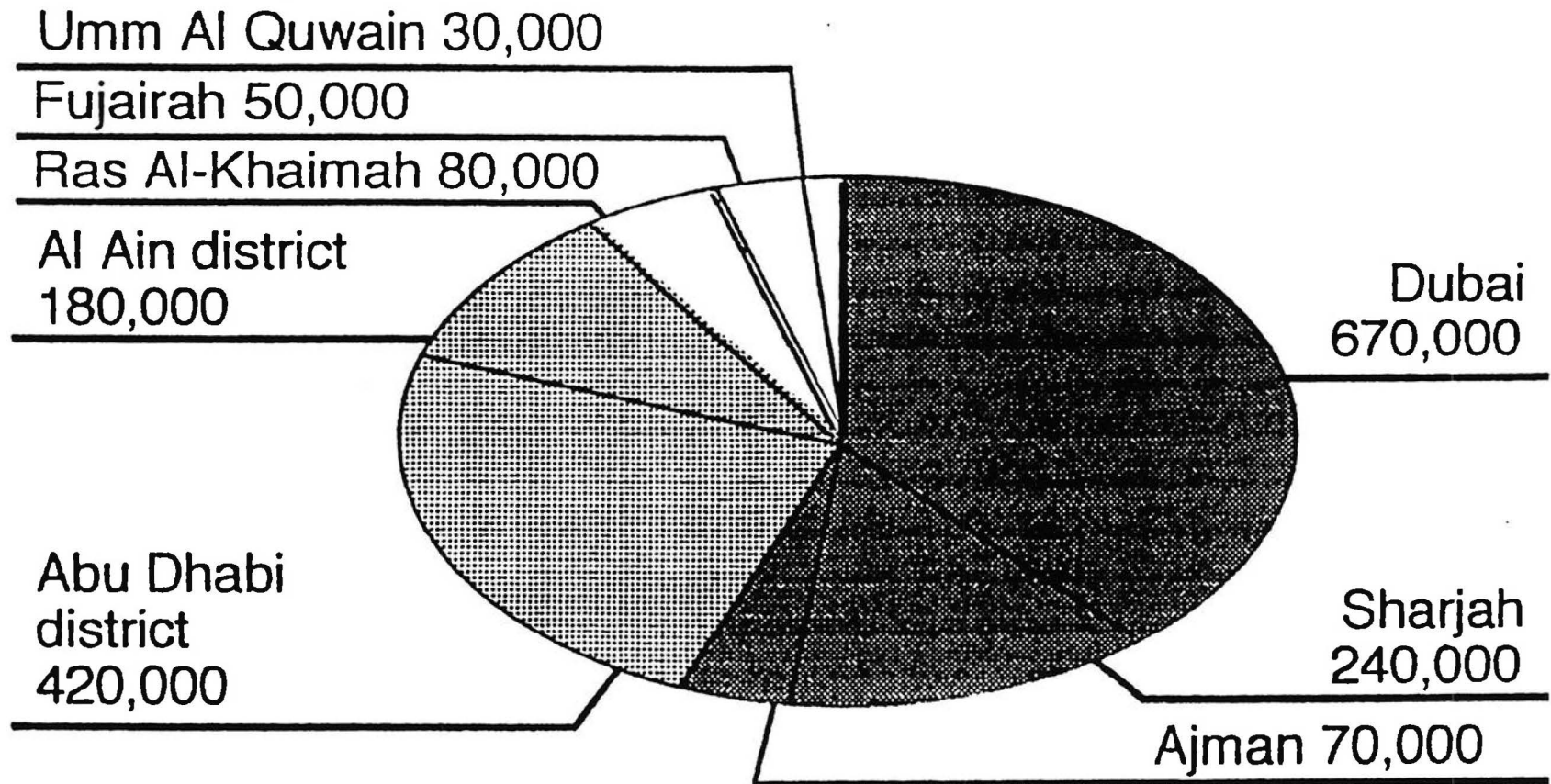
Educational status	1975		1980		1985	
	No.	%	No.	%	No.	%
Illiterate	119,332	41.2	170,606	30.6	185,368	27.1
Reads and writes	79,055	27.2	120,064	21.5	166,524	24.3
Primary school graduate	19,717	6.8	58,576	10.5	58,958	8.6
Preparatory school graduate	19,414	6.7	56,888	10.2	75,310	11.0
Secondary school graduate	31,680	10.9	83,206	14.9	98,154	14.4
Below university	4,219	1.4	18,082	3.3	28,387	4.2
Graduate	15,722	5.4	45,949	8.2	64,678	9.5
Post-graduate	1,097	0.4	4,150	0.8	6,266	0.9
<b>Total</b>	<b>290,236</b>	<b>100.0</b>	<b>557,520</b>	<b>100.0</b>	<b>683,645</b>	<b>100.0</b>

SOURCE: Shihab, 1992:47

FIGURE 1

# Expatriates in the UAE, end of 1993

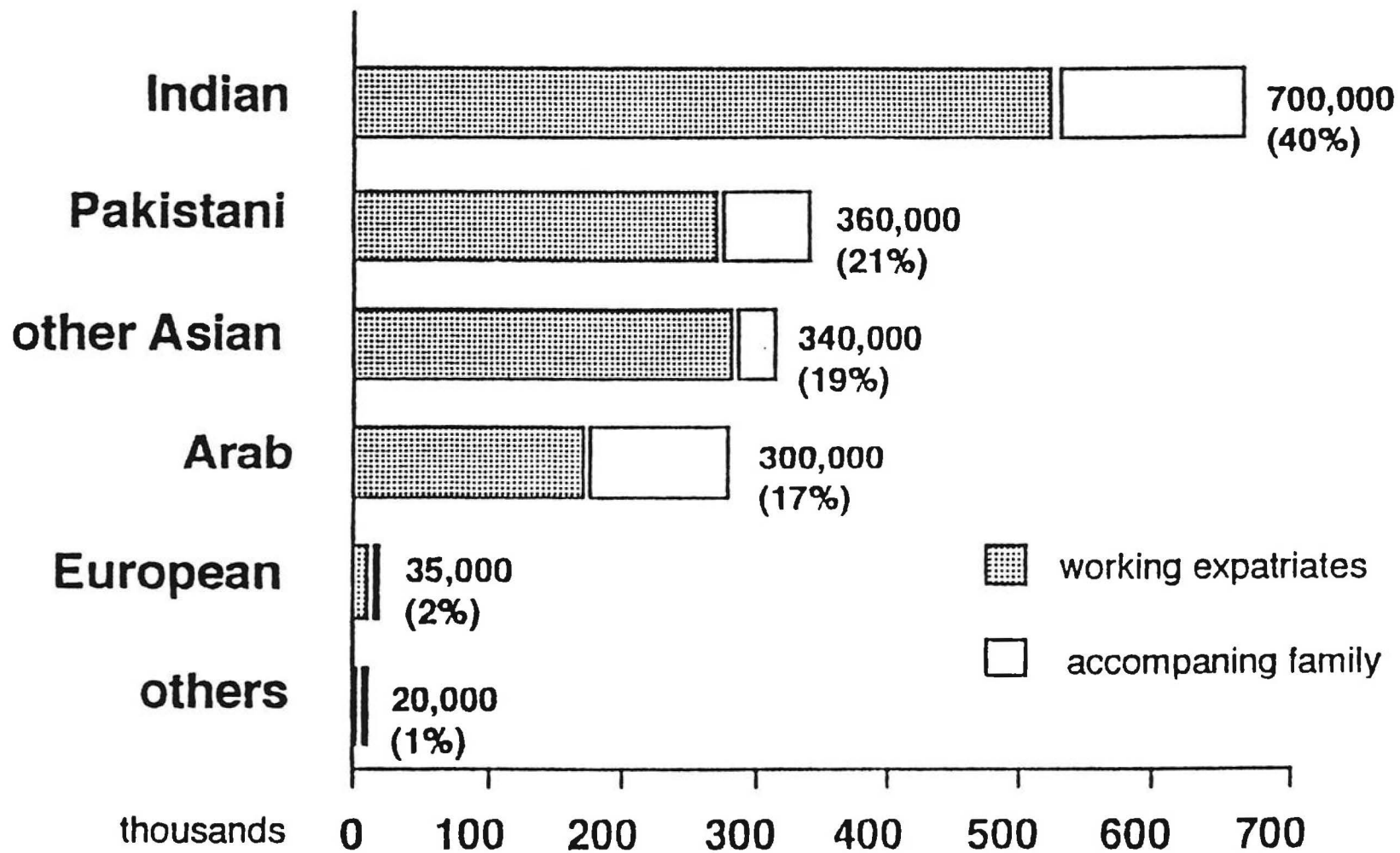
(total 1,750,000)



SOURCE: Dryland Consultants, 1993:25



# Expatriate nationalities in the UAE



SOURCE: Dryland Consultants, 1993:26

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